FINANCIAL HISTORY

THE MAGAZINE OF THE MUSEUM OF AMERICAN FINANCE

The Buildings Banks Build

Redlining in the Suburbs, 1950s–1960s

American Adolescence: Growth Without Guardrails in the Gilded Age

ISSUE 156 | WINTER 2026

Introducing

Museum of American Finance
at Commonwealth Pier, Boston

OPENING 2026

MU$EUM
OF AMERICAN
FINANCE

For more information, visit:

MoAF.org/Boston

MU$EUM OF AMERICAN FINANCE

The Museum of American Finance gratefully recognizes the financial support of the following 2025 donors. Their generosity helps advance our commitment to preserving, exhibiting and teaching the power and value of American finance.

PRESENTING

- Fidelity Center for Applied Technology
- Shenkman Capital

PLATINUM

- Citadel
- Citadel Securities
- Eldridge Industries
- Jefferies
- Carol Kaimowitz
- Robert Robotti

GOLD

- Greg and Anne Bauer
- Cohen Family Foundation
- Mr. and Mrs. Richard Gephardt
- The Lynch Foundation
- Richard Sylla

SILVER

- Accenture
- Alliant Insurance
- Broadridge Financial Solutions, Inc.
- Ric Edelman
- Charles Elson
- Fitch Group
- Goldman Sachs
- Martha Clark Goss
- John E. Herzog
- Glenn Kaufman
- Oliver Wyman
- Lynn O'Mealia
- Palisade Capital Management
- Protiviti
- Royce Investment Partners
- UBS Financial Services
- VanEck Funds
- Dennison (Dan) Veru
- Virtu Financial
- Wells Fargo

BRONZE

- Adirondack Trust Company
- Bloomberg
- Fordham University Gabelli Center for Global Security Analysis
- The George W. Bauer Family Foundation
- Martin Fridson
- ING
- JPMorgan Chase
- Mayer Brown LLP
- Elizabeth O'Melia
- Savills US

DONORS ($1,000+)

- Joyce Aboussie
- Alvi Abuaf
- Anonymous
- Theodore Aronson
- Howard Baker
- Brown Family Foundation
- BTIG
- Caren Byrd
- Tom Conway
- Lawrence Cunningham
- Andrea de Cholnoky
- Jeanne Driscoll
- Friedman Family Foundation
- Lawrence Goodman
- Cory Gunderson
- Molly Hall
- Healy Family Foundation
- Alfred Jackson
- Frank and Barbara Kardos
- Alfred F. Kelly, Jr.
- Consuelo Mack
- Vincent and Anne Mai
- MCJ Amelior
- Joseph Mecane
- Daniel & Lynn Munson
- Elizabeth Munson
- Mr. and Mrs. Jorge E. Nario
- Bradley Peterson and Kerry Peterson
- Bob Pisani
- Ben Row
- Saybrook Capital
- Anthony and Deidre Scaramucci
- David Shuler
- Strategas
- John and Amy Weinberg
- Anthony Yoseloff

FINANCIAL HISTORY

THE MAGAZINE OF THE MUSEUM OF AMERICAN FINANCE

in association with the Smithsonian Institution

Issue 156 • Winter 2026
(ISSN 1520-4723)

Kristin Aguilera
Editor

EDITORIAL ADVISORY BOARD

Howard A. Baker, Esq.
Howard Baker Associates

Lawrence A. Cunningham
University of Delaware

Peter C. Earle
American Institute for Economic Research

Brian Grinder
Eastern Washington University

Mark Higgins
Index Fund Advisors (IFA) Institutional

Gregory DL Morris
Freelance Journalist

Susie Pak
St. John's University

Arthur W. Samansky
The Samansky Group

Myles Thompson
Columbia Business School Publishing

Janice Traflet
Bucknell University

Robert E. Wright
University of Austin

Jason Zweig
The Wall Street Journal

ART DIRECTION
Alan Barnett Design

MUSEUM STAFF
David J. Cowen, President/CEO
Kristin Aguilera, Deputy Director
Robert Dinkelmann, IT/Technology
Maura Ferguson, Director of Exhibits
Gregory DL Morris, Research Associate
Linda Rapacki, Managing Director of Visitor Services and Operations
Mindy Ross, Director, External Relations

Copyright © 2026 by the Museum of American Finance, publisher. All rights reserved.

Financial History is the official membership magazine of the Museum of American Finance.

MU$EUM OF AMERICAN FINANCE

Smithsonian Affiliate

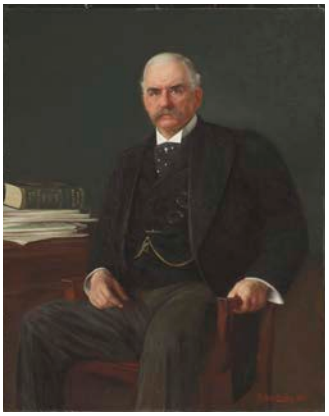
IN THIS ISSUE FEATURES

10 **American Adolescence**
Growth without guardrails in the Gilded Age.
▶ **By Mark J. Higgins**

16 **Cracked Foundations**
Redlining in the suburbs, 1950s–1960s.
▶ **By Michael R. Glass**

20 **The Banker Who Made America**
Thomas Willing and the Panic of 1792.
▶ **By Richard Vague**

24 **The Rise and Fall of the Conglomerates**
The 1950s and 1960s were the heyday of the conglomerate era, but the category is now nearly extinct.
▶ **By Martin Fridson**



28 **Before the Fed**
J.P. Morgan, America's lender of last resort.
▶ **By Jon Moen and Mary Tone Rodgers**

32 **The Buildings Banks Build**
An architectural history of New York City's most notable bank buildings.
▶ **By E. James Smith**

IN THIS ISSUE DEPARTMENTS

4 **Message to Members**
▶ **By David Cowen, President and CEO**

6 **Educators' Perspective**
Risk, Return and Rembrandt: Part 2
▶ **By Brian Grinder and Dan Cooper**

38 **Book Reviews**
1929: Inside the Greatest Crash in Wall Street History—And How It Shattered a Nation, by Andrew Ross Sorkin
▶ **Reviewed by Michael A. Martorelli**
The Land Trap: A New History of the World's Oldest Asset, by Mike Bird
▶ **Reviewed by James P. Prout**

40 **Trivia Quiz**

ON THE COVER

Artist's rendering of the JPMorgan Chase Tower at 270 Park Avenue during construction. The building opened in October 2025 and is New York's newest skyscraper. See related article, page 32.

CrossingLights

TRUSTEES

Peter A. Cohen, *Chair*
Andover National Corporation

Andrea de Cholnoky,
Co-Vice Chair
Golden Seeds

Karen Gephardt, *Co-Vice Chair*
Fusion Partners

Sanford Crystal, *Treasurer*
Alliant Insurance Services, Inc.

Alvi Abuaf
Motive Partners Private Equity

Peter Akwaboah
Morgan Stanley

Sabrina Bailey
Fiducient Advisors

Gregory Bauer
Moody's (retired)

Douglas Cifu
Virtu Financial

Marcy Cohen
ING Americas

Wendy M. Cohn
Fitch Ratings

David J. Cowen, *President/CEO*
Museum of American Finance

Lawrence A. Cunningham
University of Delaware

Patrick Curtin
Citi

Ric Edelman
Digital Assets Council of Financial Professionals

Charles Elson
University of Delaware

Eileen Fahey
Fitch Ratings (retired)

Martin Fridson
Lehmann, Livian, Fridson Advisors LLC

Adam Goldstein
Archer Aviation

Martha Clark Goss
American Water Works

Kirk Haldeman
J.P. Morgan Chase & Co.

Carol Kaimowitz
Retired Insurance Executive

Glenn Kaufman
Kaufman Family LLC

Ranch Kimball
Glorious Cahoots Capital Partners

Mitti Liebersohn
Savills

Consuelo Mack
WealthTrack

Joseph Mecane
Citadel Securities

Jorge Nario
Fidelity Center for Applied Technology (FCAT)

Anders Nemeth
Oliver Wyman

Eamon Nolan
Vinson & Elkins

Lynn O'Mealia
Loudon Investment Management

Elizabeth O'Melia
ProCFO Partners

Chris Perry
Broadridge

Matthew Perconte
Protiviti

Brad Peterson
Nasdaq

Bob Pisani
CNBC

Scott Reddel
Accenture

Robert Robotti
Robotti & Company

Mark Shenkman
Shenkman Capital Management, Inc.

David L. Shuler
Varro Life Sciences

Richard Sylla
New York University

Dan Veru
Palisade Capital Management

Charles Wait
The Adirondack Trust Company

John E. Herzog,
Chairman and Trustee Emeritus

MoAF Acquires Two Significant Collections

Message to Members

David J. Cowen | President and CEO

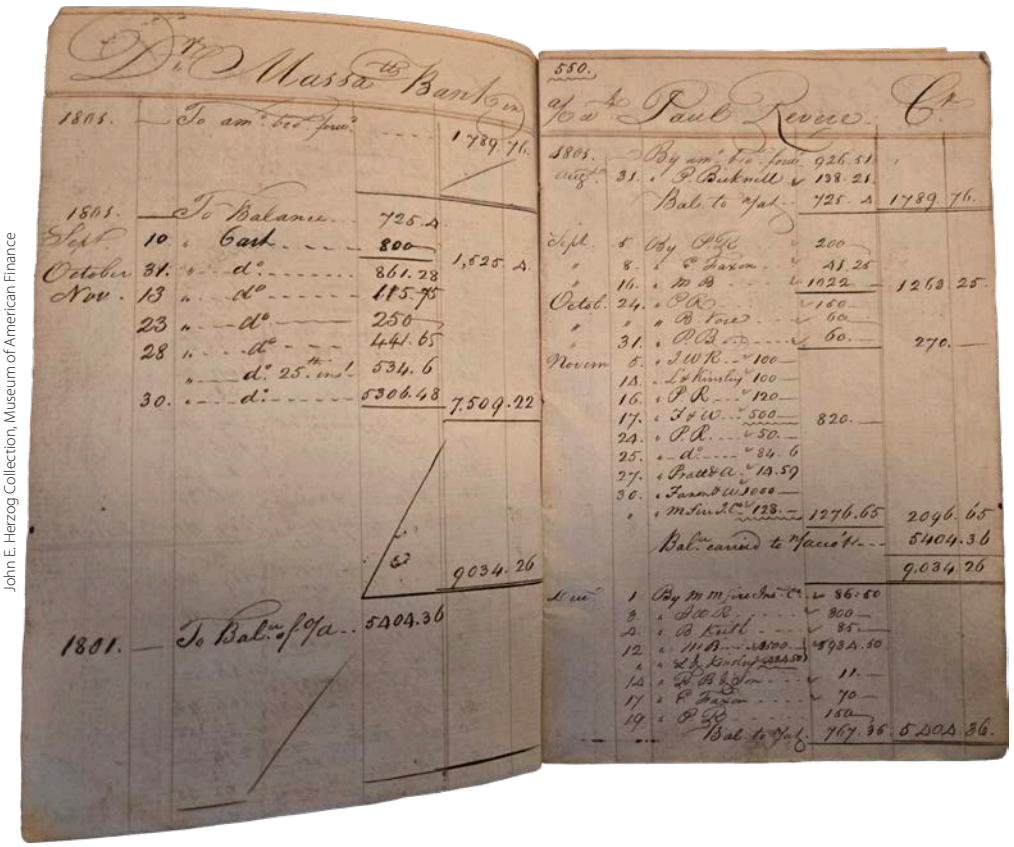
I am excited to begin my first column of 2026 by announcing the acquisition of two artifact collections. In December, the Museum received a significant donation to its collection from John E. Herzog, who founded the Museum in 1989 and currently serves as trustee and chairman emeritus. The John E. Herzog Collection includes rare and important US founding financial documents including Paul Revere's bank book, a US Treasury Bond owed by John Hancock and signed by Alexander Hamilton, a Bank of the United States check signed by Thomas Jefferson and an 1808 US Loan Office certificate payable to Harvard College.

Also in December, the Museum acquired all of the financial artifacts, as well as select books, from the Rodney G. Klein Stock Market Museum in Massillon, Ohio. The collection includes a number of historical stock tickers and other financial technologies, as well as stock exchange artifacts, photographs and memorabilia. We will feature more on this collection and Rodney Klein in the next issue of our magazine.

Select objects from both of these collections will be on view in the debut exhibits when we open in Boston in July 2026. A preview of the exhibits is available on our website at www.moaf.org/Boston, along with other material on the project.

In other exciting news, we have one of the strongest line-ups to date set for our annual Gala on March 5. Our Whitehead Award honoree will be Byron Trott, chairman and co-CEO of BDT & MSD Partners, who will be introduced by former US Treasury Secretary Henry Paulson, Jr. Our Lifetime Achievement Award honoree will be Mary Ellen Stanek, president of the Baird Funds, who will be introduced by Timothy Michael Cardinal Dolan, archbishop emeritus of New York. Our Financial Innovation Award will be presented to David Booth, founder and chairman of Dimensional Fund Advisors, who will be introduced by William (Bill) Bradley, managing director of Allen & Company and former New Jersey Senator.

The Gala will be held at the Ziegfeld Ballroom in midtown Manhattan, with former CNBC Senior Markets Correspondent Bob Pisani and "WealthTrack" Executive Producer and Managing Editor Consuelo Mack serving as masters of ceremony. We look forward to an evening celebrating the "Expanding Impact, Reach and Footprint" of the Museum in 2026. More on our Gala, including information on tickets, advertising and sponsorship, can be found at www.moaf.org/2026Gala. $



John E. Herzog Collection, Museum of American Finance

Rodney G. Klein Stock Market Museum

A recent collection donation from the Museum's founder, John E. Herzog, includes Paul Revere's bank book detailing his financial dealings at his Massachusetts Bank (left). The Museum recently acquired the entire artifact collection of the Rodney G. Klein Stock Market Museum in Massillon, Ohio, which includes a number of historical stock tickers and other financial technologies (above).

Fall 2025 MFA Scholarship Winners

The Museum is proud to announce that the following students have earned merit scholarships as top achievers in the Fall 2025 semester of the Museum Finance Academy.

Name: Cole Edwards
Grade: 12
Home Town: Corning, NY
High School: Corning Painted Post High School
Scholarship: $1,000

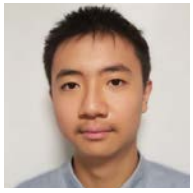
Name: Samuel Furman
Grade: 12
Home Town: Brooklyn, NY
High School: Brooklyn Technical High School
Scholarship: $1,000

MU$EUM OF AMERICAN FINANCE

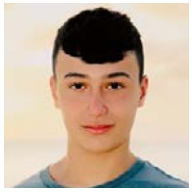
Sponsored by: FitchGroup

Name: Richard Feng
Grade: 11
Home Town: New York, NY
High School: Stuyvesant High School
Scholarship: $500

Name: Polina Kochubina
Grade: 12
Home Town: New York, NY
High School: James Madison High School
Scholarship: $500



Name: Jay Chen
Grade: 11
Home Town: New York, NY
High School: Stuyvesant High School
Scholarship: $250



Name: Michael Dadashev
Grade: 12
Home Town: New York, NY
High School: Brooklyn School of Excellence
Scholarship: $250

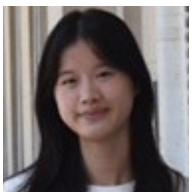
Name: Sebastian Medina
Grade: 11
Home Town: Springfield, MA
High School: Central High School
Scholarship: $250

Name: Ethan Zhang
Grade: 11
Home Town: New York, NY
High School: Stuyvesant High School
Scholarship: $250

Name: Yutong Chen
Grade: 11
Home Town: New York, NY
High School: The Bronx High School of Science
Scholarship: $150

Name: Madison France
Grade: 11
Home Town: New York, NY
High School: Bedford Academy High School
Scholarship: $150

Name: David Krystal
Grade: 11
Home Town: New York, NY
High School: Stuyvesant High School
Scholarship: $150



Name: Selena Yu
Grade: 11
Home Town: New York, NY
High School: Stuyvesant High School
Scholarship: $150

Name: Indiana Sallade
Grade: 12
Home Town: Corning, NY
High School: High School Learning Center
Scholarship: $100

Name: Michelle Wade
Grade: 11
Home Town: New York, NY
High School: Robert F. Kennedy High School
Scholarship: $100

Risk, Return and Rembrandt: The Painting

By Brian Grinder and Dan Cooper

"And he awoke and rebuked the wind and said to the sea, 'Peace! Be still!' And the wind ceased, and there was a great calm. He said to them, 'Why are you so afraid? Have you still no faith?' And they were filled with great fear and said to one another, 'Who then is this, that even the wind and the sea obey him?'"

— Mark 4:39–41 ESV

Rembrandt had an uncanny ability to capture stories from the Bible at the moment of peak intensity. He made the old, well-known stories come to life in a way that piques our interest, drawing us into the scene.

For instance, *The Blinding of Samson* (1636) depicts Delilah's betrayal of Samson. A Philistine soldier stabs a dagger into Samson's right eye, while Delilah, shears in one hand and Samson's shorn lock of hair in the other, flees the scene. *Abraham's Sacrifice* (1635) captures the moment when Abraham, having bound his son, grabs Isaac's face, stretching out his neck in order to prepare it for the knife thrust that will soon end his life. As Abraham raises his right hand to plunge the knife into his son, an angel intercedes and grabs his wrist, causing the startled Abraham to drop the knife.

Christ in the Storm on the Sea of Galilee presents us with a seemingly hopeless situation. If the boat isn't dashed to pieces, it may well capsize or be swamped with water and sink to the bottom of the sea. All is chaos and confusion. The disciples in the bow of the boat are struggling with the sails and the mast. One of them makes a desperate attempt to grab a gaff hook and use it to push the vessel away from a nearby rock.

In the aft, two men have just succeeded in waking Jesus from his slumber, while the helmsman pulls against the rudder in a vain attempt to control the boat. Others are simply frozen in horror as they await what appears to be certain death. A seasick disciple leans over the ship railing retching while behind him two frightened souls bow their heads in prayer.

Between the two praying disciples stands Rembrandt himself, clutching onto the rigging with one hand and holding his cap on his head with the other as he stares out from the painting. He painted himself into the biblical scene, a custom that he repeated many times throughout his long career. One of Rembrandt's favorite subjects was Rembrandt.

This detail from *Christ in the Storm on the Sea of Galilee* shows Rembrandt himself, clutching onto the rigging with one hand and holding his cap on his head with the other as he stares out from the painting.

According to Bible scholar John I. Durham, "Across the years of his career, from 1625 to his death in 1669, Rembrandt painted, etched and drew more than 70 self-portraits." He makes a cameo appearance in his 1625 painting of *The Stoning of Saint Stephen,* and is front and center with his wife Saskia in his 1635 work *The Prodigal Son in the Brothel.* In his 1633 *The Raising of the Cross*, Rembrandt highlights himself as he helps Roman soldiers lift the cross into an upright position. In the same year, Rembrandt painted *The Descent from the Cross,* where he pictures himself bearing the full brunt of Christ's dead body as it is removed from the cross. Durham posits that, "The events of the biblical story were for [Rembrandt] *real* events, so real that he frequently imagined himself as part of them."

Christ in the Storm on the Sea of Galilee appeared on the front cover of Peter Bernstein's classic book, *Against the Gods: The Remarkable Story of Risk,* 363 years after it was painted. This remarkable work of art, stolen six years before the publication of *Against the Gods*, came to represent something far more than what Rembrandt originally intended.[1] Risk—wild and untamed for millennia—could now be managed and controlled by mere mortals.

The history of risk and the development of risk management is brilliantly chronicled in the pages of *Against the Gods*. Yet Bernstein never mentions this painting in the book. A black and white reproduction of *Christ in the Storm* appears on page 95, along with a quote from Shakespeare's *The Merchant of Venice*:

> My ventures are not in one bottom trusted,
> Nor to one place; nor is my whole estate
> Upon the fortune of this present year;
> Therefore, my merchandise makes me not sad.

Bernstein writes, "Quite aside from financial forms of risk management, merchants learned early on to employ

Museum of Fine Arts of Lyon

Gemaldegalerie Alte Meister

Rembrandt makes a cameo appearance in his 1625 painting of *The Stoning of Saint Stephen* (left) and is front and center with his wife Saskia in his 1635 work *The Prodigal Son in the Brothel* (right).

diversification to spread their risks. Antonio, Shakespeare's merchant of Venice, followed this practice." Diversification is still today one of the most well-known forms of risk management.

It appears then that *Christ in the Storm,* coupled with the Shakespeare quote, speaks primarily to the issue of diversification in *Against the Gods.* But *Christ in the Storm* can teach us much more about risk. First, by placing himself in the boat, Rembrandt is signaling his own attitude about risk. Russ Ramsey, writing from a pastoral perspective, believes that, "By painting himself into the boat in *The Storm on the Sea of Galilee*, Rembrandt wants us to know that he believes his life will either be lost in a sea of chaos or preserved by the Son of God. Those are his only two options. And by peering through the storm and out of the frame to us, he asks if we are not in the same boat." This places Rembrandt squarely in Bernstein's premodern view of risk where since the future is "a whim of the gods," there is no point in trying to manage or master it.[2]

Rembrandt also reminds us that sometimes a risky situation can be resolved in an unexpected way. The disciples woke Jesus up from a deep sleep so he could lend a hand with the storm-tossed boat. None of them had any idea that he would stand up, utter the words "Peace! Be still!" and calm the raging sea. While we can't expect miracles to rescue us from a risky financial situation, we should not hesitate to look beyond traditional approaches to risk mitigation, especially when new and unique risk situations present themselves.

"Quite aside from financial forms of risk management, merchants learned early on to employ diversification to spread their risks."

— Peter Bernstein, in *Against the Gods*

There is also much to be said for being patient instead of panicking in a seemingly hopeless situation. Hold on to the rope a little bit longer instead of doing something desperate, foolish or rash. Notice in the painting that Rembrandt isn't doing anything. He is not struggling against the winds and the sea, he is not frozen in fear, he is not panicked, he is not praying and he is not yelling at Jesus. He is not engaged in pointless activities whose only purpose is to give him the illusion of control. He is just holding on, calmly staring out at us. Calmness in the midst of chaos is a gift.

As he peers out at us in the midst of the storm, Rembrandt shows no fear because he knows what is going to happen in the

Alte Pinakothek

In his 1633 *The Raising of the Cross*, Rembrandt highlights himself as he helps Roman soldiers lift the cross into an upright position.

next few seconds. Risk management cannot predict the future, but it allows us to face the future with less trepidation. Perhaps it is a gift from the gods. $

Brian Grinder is a professor at Eastern Washington University and a member of Financial History*'s editorial board. Dr. Dan Cooper is the president of Active Learning Technologies.*

Notes

1. According to Durham, "A work of art, completed by its creator, has a life of its own. It may come to mean less or even more than the artist who gave it life would claim for it. It may indeed come to mean something very different from what the artist had in mind, even something that would never, perhaps *could* never, have occurred to the artist."
2. See Bernstein's *Against the Gods: The Remarkable Story of Risk*, page 1.

Sources

Bernstein, Peter L. *Against the Gods: The Remarkable Story of Risk*. John Wiley & Sons. 1996.

Durham, John I. *The Biblical Rembrandt: Human Painter in a Landscape of Faith*. Mercer University Press. 2004.

Mee, Charles L. *Rembrandt's Portrait: A Biography*. Simon and Schuster. 1988.

Ramsey, Russ. *Rembrandt Is in the Wind: Learning to Love Art Through the Eyes of Faith*. Zondervan Reflective. 2022.

Ryken, Leland and Philip Graham Ryken, editors. *The Literary Study Bible: ESV: English Standard Version*. ESV text ed. Crossway Bibles. 2007.

Schama, Simon. *Rembrandt's Eyes*. Alfred A. Knopf. 1999.

THE JOURNAL OF THE INTERNATIONAL BOND & SHARE SOCIETY
SCRIPOPHILY
ENCOURAGING COLLECTING SINCE 1978
NO.128 - OCTOBER 2025
Italy!
Fred Holabird Bows Out – page 6
MoAF Gets a New Home! – page 4
Annual General Meeting – page 5
Membership Directory Coming! – page 8
Worldwide Auctions – page 32
Kindling brings BP50,400 – page 9
Mama Mia! – page 24
The Story of FIAT – page 15
Tuna Fish Salad – page 27
The Franco-Italian Co – page 29
Accessories that Reveal History – page 22
Houdini's Secret Stocks – page 30

INTERNATIONAL BOND & SHARE SOCIETY

PUTTING FINANCIAL HISTORY IN YOUR HANDS

Join the **International Bond & Share Society**, supporting collectors of vintage bonds and shares from all countries for over forty years. For $35, £28 or €32 annually, receive:

- Three issues a year of our full color 52 page journal *Scripophily* with news, in-depth articles, auction reports and more
- Membership Directory listing dealers, auction houses and fellow collectors
- Members-only part of the Society website, **scripophily.org**
- Members' Newsletters with up-to-date information and event schedule

Subscribe to our Newsletter:

www.scripophily.org **membership@scripophily.org**

MU$EUM OF AMERICAN FINANCE

2026 GALA

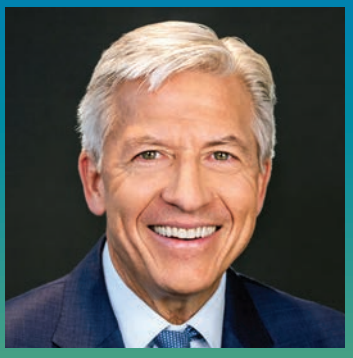
Thursday, March 5, 2026

ZIEGFELD BALLROOM • 141 WEST 54TH ST, NEW YORK, NY

PRIVATE RECEPTION: 5:30PM • COCKTAIL RECEPTION: 6PM

DINNER & PROGRAM: 7PM

HONORING



Byron D. Trott

WHITEHEAD AWARD FOR DISTINGUISHED PUBLIC SERVICE & FINANCIAL LEADERSHIP

David G. Booth

FINANCIAL INNOVATION AWARD

Mary Ellen Stanek

LIFETIME ACHIEVEMENT AWARD

American Adolescence

GROWTH WITHOUT GUARDRAILS IN THE GILDED AGE

By Mark J. Higgins

"So rapid has been the change that men's thoughts have been hardly able to adapt themselves to it; still less has the law been able to keep pace with it. The change has brought evils and dangers, previously unknown, and even now imperfectly understood."

— Arthur T. Hadley, former President of Yale University, 1886

On March 11, 1868, Jay Gould and James "Jubilee Jim" Fisk were enjoying a celebratory feast at Delmonico's after thwarting Cornelius Vanderbilt's attempt to gain control of the Erie Railway. But their mood soured when they discovered that New York law enforcement was moving on warrants issued for their arrest. The action was the latest in a flurry of competing court rulings tied to the escalating battle with Vanderbilt.

In the preceding weeks, Vanderbilt had aggressively purchased Erie Railway shares in an effort to consolidate control of the railroad and remove its notorious treasurer, Daniel Drew. A newly formed alliance led by Gould, Fisk and Drew responded by authorizing a massive issuance of convertible bonds, which were then immediately converted into equity and dumped on the market. Despite spending more than $7 million, Vanderbilt found his ownership stake in Erie effectively unchanged.

With arrest warrants issued, Vanderbilt had regained the upper hand—but only in New York. Drew fled immediately for the safety of New Jersey. Gould and Fisk delayed, but when it became clear that their arrest was imminent, they rushed to Canal Street and secured a rowboat and crew. After nearly capsizing in choppy waters with several million dollars hastily removed from the Erie Railway's vault, they crossed the Hudson and took refuge at the Taylor Hotel—nicknamed Fort Taylor.

The Erie Railway conflict would continue for another year, and it was ultimately resolved through a mix of court decisions and legislative intervention at the New York State Capitol. The outcome was shaped by extensive bribery—much of it paid for with the cash that Gould and Fisk smuggled to New Jersey. This was an all-too-common episode in the lawless markets of the Gilded Age.

Growth Without Governance

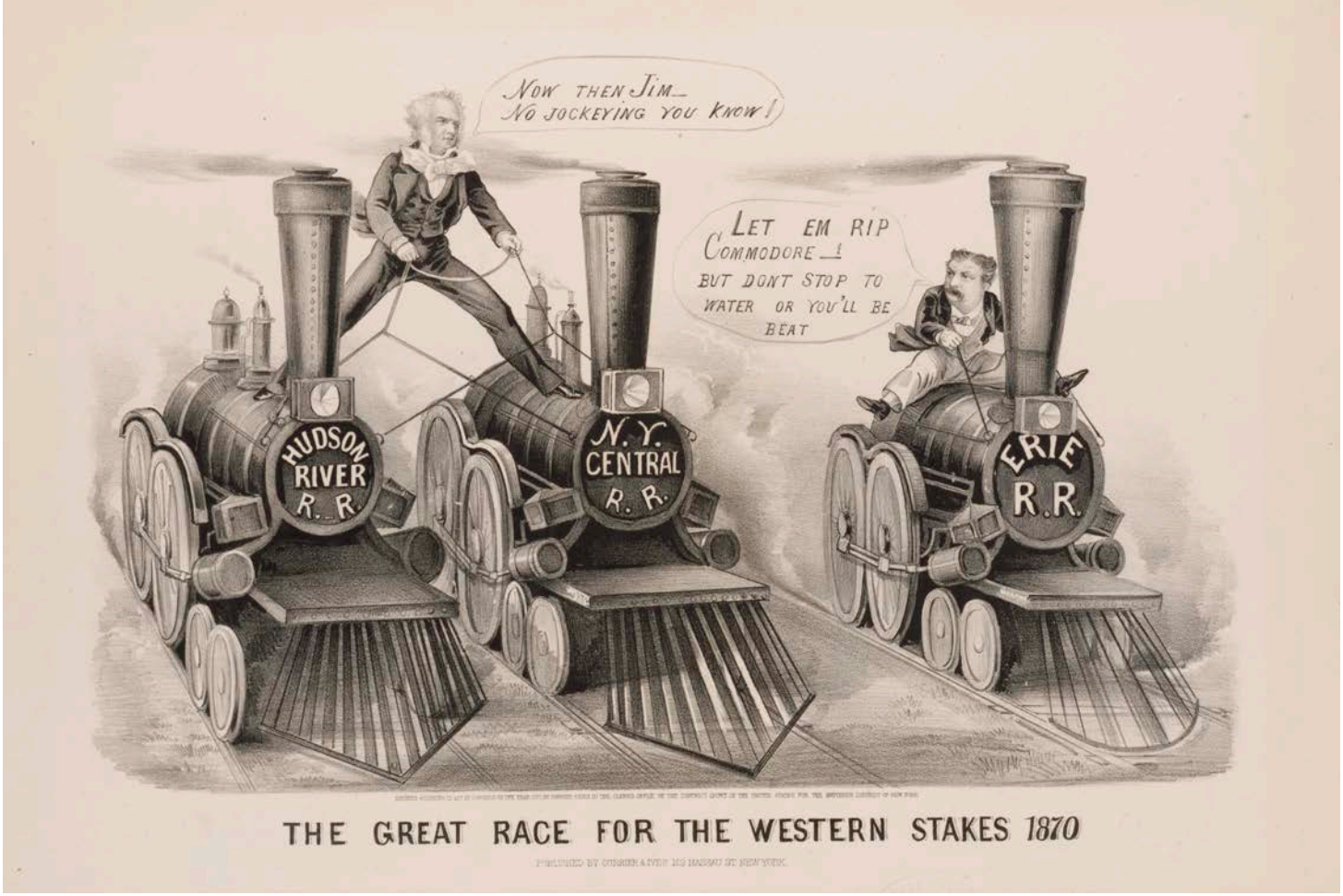
The battle for the Erie Railway did not officially mark the start of the Gilded Age, but it was emblematic of the era. What made episodes like this possible was not simply greed, but institutional immaturity. Stretching from the late 1860s to the turn of the 20th century, the Gilded Age was a period of extraordinary economic growth, but the maturation of the laws and institutions required to govern it failed to keep pace. As a result, financial markets operated with few formal constraints, and market manipulation and corporate malfeasance were common practice.

At the same time, the United States introduced groundbreaking technological advancements and massive industrial expansion, which produced substantial increases in national wealth. This is an important point that many historians discount. It is especially important to highlight because the evidence overwhelmingly reveals that the force of progress proved stronger than the counterweight of corruption.

Given these dynamics, the Gilded Age is best understood as a period of adolescence. American ambition, experimentation and discovery were often offset by impulsivity, hubris and greed. This article aims to present a more comprehensive account by examining not only the excesses of the Gilded Age, but also the stronger force of progress that persisted despite them.

The Dark Forces of the Gilded Age

The excesses of the Gilded Age are well documented in congressional investigations, newspaper accounts and court records. While this article argues that the force of progress ultimately proved stronger, examining the era's most damaging forms of corruption remains essential. It is impossible to catalog every abuse, but in securities markets the defining pathology was systematic manipulation, while in corporate boardrooms it was the scale and brazenness of self-dealing.



Library of Congress

"The Great Race for the Western Stakes," published by Currier & Ives in 1870, depicts Cornelius Vanderbilt and James Fisk in a race for control of New York's rails.

Market Manipulation

"Cheating at cards was always disgraceful. Transactions of similar character under euphemistic names of 'operating,' 'cornering,' and the like were not so regarded."

— Charles Francis Adams, Jr., 1886

During the Gilded Age, securities markets were a dangerous place for amateur investors—or even most professional investors. Few rules existed, and those that did exist were lightly enforced. The "stock operators" who dominated Wall Street rarely bothered with extensive securities analysis. Why try to predict the future, when it was possible to create the illusion of a future you desired? This is why market manipulation was the preferred path to riches.

The mechanics of market manipulation were quite simple. They were usually conducted by a stock pool, in which many investors would combine their resources and appoint a single manager to execute the strategy. A bull pool sought to increase the price of a stock, while a bear pool sought to depress it. Almost anything was possible beyond this point. Stock pools would plant false stories in newspapers or execute fictitious trades to create the perception of large-scale interest in a security—whatever would move the stock in the preferred direction. Once the desired price target was achieved, the pool would slowly exit their position, take their profit and leave the unfortunate traders caught on the other side holding the bag.

The specific objectives of stock pools were well hidden while in motion, but public awareness of the concept was no secret. Newspapers regularly reported on rumored stock pools, market corners and bear raids. Journalists were often complicit—whether through direct bribery or editorial pressure from owners involved in such schemes. Only after the catastrophic losses of the Great Depression did public outrage finally generate enough pressure to outlaw practices that had long operated in plain sight.

Corporate Self-Dealing

"The only high roads [Thomas] Durant preferred were those on his railroad. He never took an ethical high road. He betrayed partners, and he betrayed strangers. When there was no low road, he blazed one."

— Richard White, author of **Railroaded**

Corporate corruption is a problem that will never disappear entirely in the United States. But those who claim it is worse today than in the past have not immersed themselves in the Gilded Age. During this time, no industry revealed the scale and creativity of corporate corruption more thoroughly than railroads. These enterprises required enormous amounts of capital, depended heavily on the issuance of government charters and land grants and promised profits that often lay far in the future. This combination rendered them uniquely vulnerable to self-dealing—and there were plenty of tools available to those who sought to engage in it.

The Battle of the Belden Hill Tunnel

"Considering the number of men involved and, in all likelihood, the amount of alcohol consumed, the casualty list was astonishingly small; only eight or ten men had been shot, some others suffered 'bruises, more or less severe' and one man had fractured his skull. No one had been killed."

***— John Steele Gordon, author of* The Scarlet Woman of Wall Street**

For more than a year, Cornelius Vanderbilt battled Jay Gould, Jim Fisk and Daniel Drew for control of the Erie Railway. Ultimately, the duplicitous Drew was removed as treasurer, and Vanderbilt retreated after receiving a large cash settlement for the illegally issued stock he was duped into buying. But the payout left the Erie short on funds and vulnerable to competitive pressure. In 1869, Gould and Fisk concluded that absorbing the newly completed Albany and Susquehanna Railroad, which linked Albany to Binghamton, was essential to the Erie's survival.

The obstacle was Joseph H. Ramsey, president of the Albany and Susquehanna, who had no interest in surrendering control. What followed was a bitter struggle for legal authority over the railroad. Tactics included bribery, forged documents and even the burial of stock subscription books in a cemetery to prevent the completion of share sales. During the week ending August 9, 1869, the dispute culminated in dueling court orders appointing rival receivers—one aligned with Ramsey, the other with Erie interests.

Each side claimed the law was on its side and set out to secure the railroad. A Ramsey-controlled train departed from Binghamton, while an Erie-backed train left Albany. Both were packed with company employees hastily assembled for a mission few fully understood. Some men carried revolvers; others fashioned clubs from nearby forests. But most were armed only with their fists. As the trains advanced, their occupants seized stations along the route, each attempting to assert physical control of the line.

On August 10, 1869, the two trains collided at the Belden Hill Tunnel. A few shots were fired, skirmishes broke out and one prisoner was taken. Disaster was only avoided because of a fortuitous combination of widespread inebriation among the combatants, timely intervention by the Fourth Regiment of the New York State Militia and the fact that many of the combatants had little idea what, precisely, they were fighting over.

The legal battle for control of the Erie continued for another eight months. Ultimately, the Albany and Susquehanna was absorbed by a competing railroad, denying victory to Fisk and Gould. But if there was ever a moment of peak absurdity in the Gilded Age, it may well have occurred at Belden Hill.

In the earliest stages of development, securing charters and land grants was existential to railroad ventures. As a result, political bribery was rampant. In one infamous episode, financier Henry Cooke attempted to bribe Speaker of the House James G. Blaine with securities in the Northern Pacific Railroad—only to be met with Blaine's counteroffer to sell Cooke his own inventory of railroad securities, which he had accumulated from previous bribes.

A second, far more lucrative phase of corruption emerged during the construction phase. Before breaking ground, a small group of insiders would create separately managed "construction and finance" companies. These entities then subcontracted with the railroad itself, charging inflated fees for labor and materials. It was not uncommon for such companies to bill more than double prevailing market rates. The profits then flowed to a select group of insiders, while the losses were borne by investors in the railroad.

The final phase of corruption was often the most visible—and may be more familiar to modern readers—but was ironically less significant in financial terms. Tactics included the misuse of investor funds, price fixing and stock watering through excessive share issuance. While such practices drew public outrage, they were not the primary source of value extraction. By the time these abuses surfaced, much of the damage had already been done.

The Overwhelming Force of Progress

"In the midst of all this speculation, whilst some enrich and some ruin themselves, banks spring up and diffuse credit; railroads and canals extend themselves over the country; steamboats are launched into the rivers, lakes, and the sea; the career of speculators is ever enlarging, the field for railroads, canals, steamers, and banks goes on expanding. Some individuals lose, but the country is a gainer."

— Michel Chevalier, 1835

Corruption in boardrooms and securities markets created a dark cloud over the Gilded Age. But contrary to many recollections, it was also a time of tremendous economic advancement. Evidence clearly shows that the force of progress outweighed the damage of corruption. By the turn of the 20th century, the cumulative effects of advancement enabled the nation to rise as a rival to the British Empire. Some of the key drivers included manufacturing innovation, natural resource extraction and development of an expansive transportation and communication network.

Manufacturing Innovation

On May 1, 1851, Queen Victoria opened a five-month event called the Great Exhibition of Works of Industry of All Nations in London. For nearly 100 years, the British were at the forefront of the Industrial Revolution, and British entrepreneurs were excited to display their latest innovations.

The British welcomed their American cousins even though resentment remained due to recent debt defaults of many US states in the early 1840s and the persistent lawlessness of US securities markets. The

NUMBER
121730
Erie Railway Company.
This is to Certify, that
entitled to
Shares of ONE HUNDRED DOLLARS
each, in the Common Capital Stock of the ERIE RAILWAY COMPANY.
The said Stock is held subject to the By Laws and is transferable only on the
Books of said Company at their Office in the City of New York, by the said Stockholder
in person or by Attorney on the surrender of this Certificate.
In Testimony Whereof, the said Company have
caused this Certificate to be signed by their President and Secretary in New York, this
day of 18
Secretary.
President.

Museum of American Finance

Erie Railway Company stock certificate signed by Jay Gould, 1869.

British were impressed with several American inventions—such as Cyrus McCormick's mechanical reaper and Samuel Colt's revolver—but they overlooked the radical advancements in the manufacturing process that produced them. The Americans had quietly achieved the holy grail of manufacturing by creating machinery and processes that enabled manufacturers to produce machine-made products with fully interchangeable parts.

Prior to the Great Exhibition of 1851, the world was largely unaware of American advancements in precision manufacturing. After the exhibition, the innovations were collectively referred to as the "American System of Manufactures." Soon thereafter America became the leading innovator in manufacturing technology, and the American System of Manufactures became the cornerstone of the growth of US manufacturing in the Gilded Age.

In contrast to Americans, European industrialists expressed a bias toward manufacturing products at a relatively small scale and with a higher degree of customization. This philosophical difference enabled the US manufacturing sector to prevail over foreign competitors and accelerate the nation's transition from a proto-industrial economy into a mass production industrial economy.

Natural Resource Extraction

The sheer volume of natural resources scattered throughout the United States is often underappreciated. Successful extraction—especially during the late 1800s—was a major contributor to America's cost advantage in industrial production. Cheap energy in the form of coal and petroleum enabled manufacturers to reduce operating and transportation costs. The discovery of rich and easily accessible iron ore deposits provided cheap input for steel producers. Noteworthy discoveries included iron ore deposits in the Mesabi range in Minnesota; crude oil in Titusville, Pennsylvania; and multiple coal discoveries throughout the land. Extraction of these resources provided industry with inexpensive inputs to the manufacturing process and facilitated affordable transportation of finished goods to end market.

Transportation and Communication

"The fact that railroads had so irrationally spread themselves over the empty plains, in stark defiance of every tenet of conventional economics and common sense, was a major factor in the explosive rate of American growth."

—Charles Morris, author of Tycoons

Ironically, the same speculative excesses that plagued Gilded Age finance produced

The Understated Impact of the American System of Manufactures

"I have succeeded in an object that has hitherto completely baffled the endeavors of those who have heretofore attempted it—I have succeeded in establishing the methods for fabricating arms [rifles] exactly alike and with economy."

— John Hall, 1822

Beginning in the 1820s, US mechanics and entrepreneurs introduced multiple innovations that enabled manufacturers to use precision machinery to craft products with interchangeable parts. This achievement may seem relatively inconsequential in the 2020s, but it was groundbreaking in the 1800s.

Before that time, mechanics had failed for decades to establish a level of precision to manufacture parts that were interchangeable. As a result, manufacturing during the first half of the 1800s was labor intensive and heavily reliant on the use of skilled craftsmen. Finished products consisted of parts that appeared identical to the naked eye but were not interchangeable. This limitation was especially problematic in the United States because of the chronic scarcity of skilled labor.

Thomas Blanchard is often regarded as the founder of precision manufacturing. In 1818, he began designing a series of machines to build muskets. Many American engineers subsequently expanded on Blanchard's innovations. John Hall and Samuel Colt are among the more notable.

Precision manufacturing and interchangeable parts proved to be a critically important factor in the rise of the American economy during the 19th century. But more importantly, it created an infrastructure that would repel an existential threat in the next century.

a powerful and unintended benefit: the construction of a vast railroad network. The network dramatically reduced the cost of transporting raw materials and manufactured goods across the expansive mainland.

By the turn of the 20th century, the era of Jay Gould, Collis Huntington and Daniel Drew had given way to a new generation of railroad leaders and financiers, including Edward Harriman, J. Pierpont Morgan and James J. Hill. These men were more disciplined, more operationally competent and ethical. They improved efficiency and integrated railroads into a coherent national system.

In 1902, financier Frank Vanderlip noted with astonishment that freight costs in the United States averaged just 0.75 cents per ton-mile, compared with 1.6 cents in France and 2.4 cents in Great Britain. American railroads were built not merely for transport, but to serve mass manufacturing at scale. Their efficiency lowered prices across the economy and created a durable competitive advantage.

Railroads also provided natural corridors for the construction of telegraph and telephone lines, binding together a vast nation with unprecedented speed. By the early 20th century, the United States had become one of the most economically integrated societies in the world.

The Legacy of the Gilded Age

"We shall never surrender, and even if, which I do not for a moment believe, this Island or a large part of it were subjugated and starving, then our Empire beyond the seas, armed and guarded by the British Fleet, would carry on the struggle, until, in God's good time, the New World, with all its power and might, steps forth to the rescue and the liberation of the old."

— Winston Churchill, June 4, 1940

On December 7, 1941, the Empire of Japan struck a devastating blow on the US Pacific Fleet, stationed at Pearl Harbor on the Hawaiian island of Oahu. On the very next day, the United States declared war on Japan. The Americans then joined the British in the war against Nazi Germany when Hitler foolishly declared war on the United States three days later. Over the next four years, nearly the entire world was embroiled in the deadliest conflict in human history. An estimated 100 million people perished before World War II ended on September 2, 1945, with the formal surrender of Japan.

Many factors explained the victory of the Allied powers in World War II, but among the most important was the ability of the United States to outproduce the Axis powers. The Nazis and the Japanese simply could not match the massive industrial output of the United States. Dubbed the Arsenal of Democracy, this unique American capability is what enabled the New World to liberate the Old.

But the US Arsenal of Democracy would not exist if not for hundreds of thousands of miles of railroad track, massive manufacturing production facilities, bottomless reserves of natural resources and innovation that was the envy of the world. The foundation of this arsenal was poured during the Gilded Age.

History offers no shortage of examples in which corruption ultimately short circuits a nation's progress, causing it to fall short of its full potential. The American experience tells a different story. Even during an era of peak corruption, the underlying force of progress was impossible to suppress. The compounding power of American innovation and the insatiable desire of its people to improve in the face of perennial imperfection ensured that corruption neither defined the nation's character nor prevented its maturation toward adulthood. $

Mark J. Higgins, CFA, CFP® is a financial historian, experienced institutional investment advisor and author. His book, Investing in US Financial History *(Greenleaf Book Group, 2024), recounts the full financial history of the United States from 1790 to 2023. He is a member of the* Financial History *editorial board and a guest curator of the Museum's forthcoming exhibits, opening in Boston in July 2026.*

Library of Congress

The Arsenal of Democracy was a critical component of the D-Day invasion by the Allied Powers on June 6, 1944. This photograph by the U.S. Maritime Commission shows landing craft and American troops coming ashore in Normandy, France, on D-Day.

Sources

Adams, Charles Francis, Henry Adams and Francis Amasa Walker. *Chapters of Erie, and Other Essays*. Boston: J.R. Osgood and Company. 1886.

Chevalier, Michel. *Society, Manners and Politics in the United States; Being a Series of Letters on North America, trans. from the third Paris ed.* Boston: Weeks, Jordan and Company. 1839.

Gordon, John Steele. *The Scarlet Woman of Wall Street*. New York: Viking Penguin. 1988.

Hadley, Arthur T. *Railroad Transportation: Its History and Its Laws*. New York: The Knickerbocker Press. 1886.

Higgins, Mark J. *Investing in U.S. Financial History: Understanding the Past to Forecast the Future*. Austin, TX: Greenleaf Book Group. 2024.

Hiltzik, Michael. *Iron Empires: Robber Barons, Railroads, and the Making of Modern America*. New York: Henry Holt and Company. 2014.

Morris, Charles R. *Tycoons: How Andrew Carnegie, John D. Rockefeller, Jay Gould and J.P. Morgan Invented the American Supereconomy*. New York: Henry Holt and Company. 2005.

"The Railroad War." *The New York Times*. August 12, 1869.

Vanderlip, Frank A. *The American Commercial Invasion of Europe*. New York: D. Appleton and Company. 1908.

White, Richard. *Railroaded: The Transcontinentals and the Making of Modern America*. New York: W.W. Norton & Company. 2011.

CRACKED FOUNDATIONS

Redlining in the Suburbs

Courtesy of Bradie Speller

By Michael R. Glass

Bradie Speller still remembers moving to Roosevelt as a nine-year-old. His parents, both born to sharecropping families in North Carolina, married in 1947 before migrating north to Brooklyn. For the next decade, his father toiled at two jobs: pressing sweaters during the day and driving a delivery truck for the New York *Daily News* at night. His mother also worked as a secretary. Even while raising three young children, they managed to save enough for a down payment on a house. "What wound up motivating us to move from Brooklyn," Speller recalls, "was that the schools were too crowded."

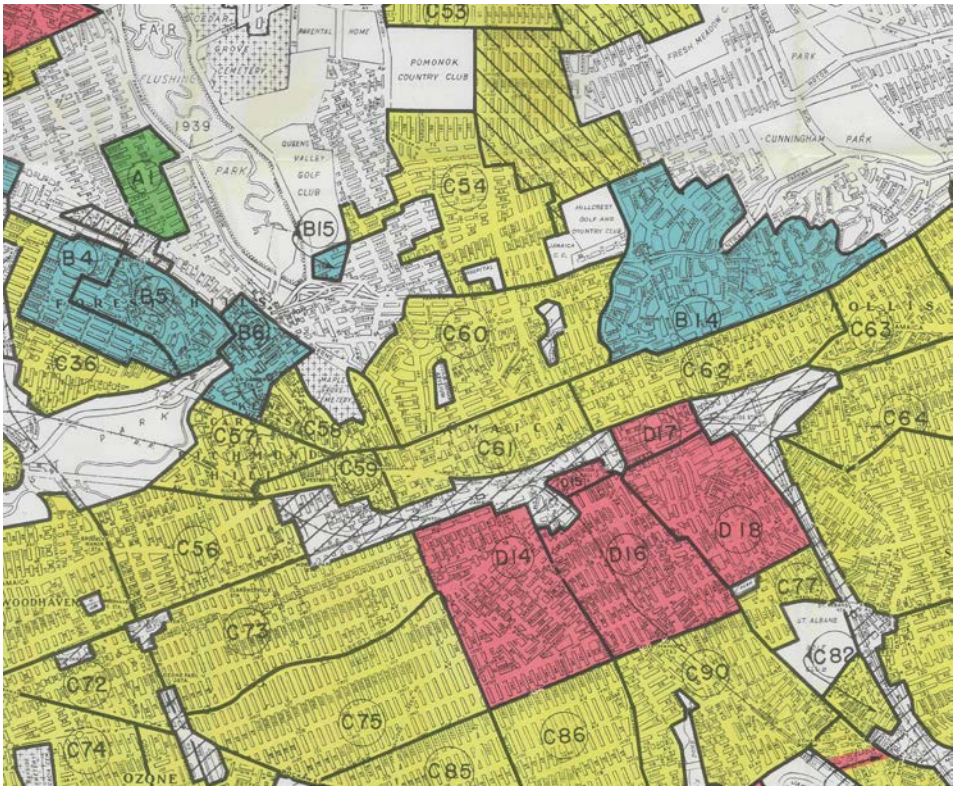
At the end of the summer of 1960, they stuffed the contents of their Brooklyn apartment into a U-Haul trailer, hitched it to the family car and headed east for the suburbs of Long Island. Eventually they arrived at "this house with grass and a fence around it." Having grown up playing in concrete parking lots, Speller and his brothers now had an entire yard to themselves. For his parents, he reflects that 1 Konig Court, a two-story Cape Cod on a corner lot, embodied what he calls "the Black middle-class dream." By that he means "they owned their own home, their kids could go to a good school and find a better life than they had."

Historians have uncovered how, in the era of redlining, people of color bought houses under more exploitative terms than their white counterparts. Excluded from full citizenship in the New Deal welfare state, non-white homebuyers were denied the protections of the Federal Housing Administration and the Veterans Administration. Instead, they faced conditions of "predatory inclusion," with higher costs and more unsteady terms.

Much of this scholarship has focused on land installment contracts, an unconventional mortgage used by many Black and Latino homebuyers. Under this arrangement, the seller retained ownership until the buyer paid back the entire loan. Buyers who missed just one monthly payment could be foreclosed upon and evicted, sacrificing all their accrued equity. In essence, land installment contracts saddled buyers with all the burdens of homeownership, such as repairs and property taxes, without any of the benefits.

But land installment contracts were just one of many unconventional mortgages. To buy their house in Roosevelt, the Spellers assumed the outstanding mortgage from the previous white owners, Michael and Rita Tedeschi, picking up the monthly payments where they left off. To cover the rest of the sales price, the Spellers used a "purchase money mortgage." Most likely because they could not obtain a bank loan, the white couple lent them much of the funds. In effect, the Tedeschis acted as both seller and lender. The Spellers never had to apply for a loan themselves, thus circumventing the redlining policies of mortgage lenders and federal underwriters. They arranged a personal loan with the

Bradie Speller (left), with family in front of 1 Konig Court, 1960.



Mapping Inequality

Home Owners' Loan Corporation, Residential Security Map for Queens, New York, 1938.

Tedeshis, agreeing to repay them for the next 10 years. Without that agreement, the Spellers could not have afforded the house.

Although purchase money mortgages offered a non-traditional path to homeownership, the terms of the loan were still precarious and exploitative. For the next decade, the Spellers made not one but two monthly payments: one to the bank for the older conventional mortgage and another to the Tedeschis for the purchase money mortgage. In addition to requiring double payments, the personal contract included harsh stipulations. One of the clauses stated that the entire sum, principal and interest, "shall become due...after default in the payment of any installment." If the Spellers missed even a single payment, they would immediately have to fork over the entire $3,025 (about $33,000 in 2026 dollars). One missed paycheck, one medical emergency, one major car repair away from the risk of foreclosure, their suburban dream sat on fragile ground.

Over time, the contract became a crushing obligation. Bradie Speller's father took great pride in their new home, spending most weekends mowing the lawn and trimming the hedges. But to keep up with the double payments he continued working two jobs, day and night, long after the move. He was often so exhausted, Speller recalls, that "he'd come home and go straight to sleep." Whereas white suburbanites increasingly experienced mortgage debt as an opportunity, as a route to upward mobility, the Spellers felt it as a burden that extracted wealth.

Through these and other financing techniques, people of color joined the suburban migration. Due to mortgage redlining and other exclusionary practices, Roosevelt was one of the few places on Long Island open to Black Americans. An unincorporated hamlet of one square mile, the tiny suburb offered something of a haven for migrants like the Spellers. As of 1960, one in five of its 11,000 residents were Black, and most of them were clustered in a 15-block section in the southeast corner. Back in the 1920s, speculators had chopped the land into gridded lots, hoping to quickly resell them. With the collapse of the real estate bubble, most of those ventures went bust. Many lots remained vacant 30 years later, with several roads unpaved and unfinished. Lifelong resident Dora Mackey-Smith remembers growing up in a rugged environment: "On one side of the street it was houses, on the other side it was woods."

Due to the half-empty blocks, much of the area lacked basic public services. Like other unincorporated hamlets, Roosevelt did not have a sewer system, instead relying on individual septic tanks or cesspools for waste disposal. Most houses in the Black section were not even connected to a water system, forcing residents to draw water from backyard wells. Cheap land and meager infrastructure kept the housing affordable, but only by saddling residents with all the hazards of speculative development.

Like Bradie Speller's parents, many of the newcomers used unconventional mortgages to buy their houses. James and Dorothy Revis also obtained a purchase money mortgage from the departing white owner. Except in the case of the Revises, the terms of the loan were even harsher.

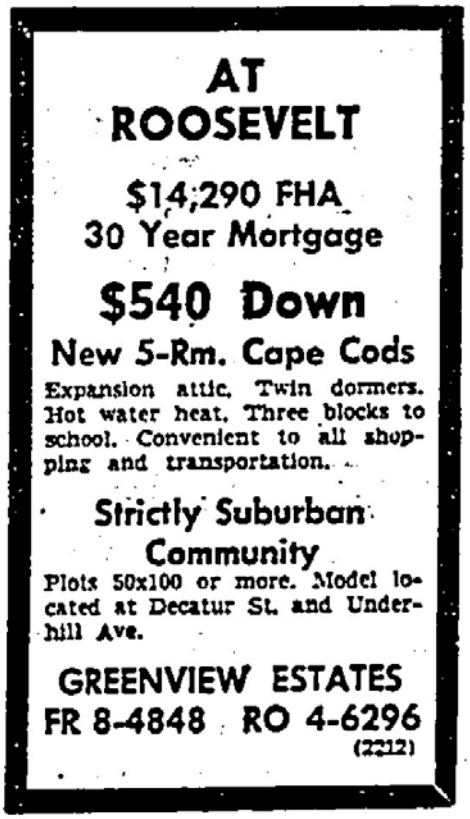
Freeport Historical Society

Postcard of Roosevelt, New York, 1910.

One clause stated that the previous owner could repossess the house after a single missed payment. Another required a hefty balloon payment at the end. After five years of making steady payments of $70 each month, the "entire unpaid balance," a sum of approximately $2,700, would all "become due" at once.

The property records indicate that the Revises struggled to meet these terms. At the five-year mark in 1955, the prior owner began foreclosure proceedings to recover the missing balloon payment. It appears, however, that the Revises negotiated an extension, because they eventually paid off the mortgage in 1960. Through untold sacrifices, they managed to scrape together enough to keep their home.

While individual families used unconventional mortgages to buy older houses, builders did the same to construct new ones. Large-scale builders such as Levitt & Sons had skipped over the patchwork of lots in Roosevelt, preferring to acquire big chunks of undeveloped farmland. After the farms were plowed over and the market for white homebuyers became increasingly saturated, smaller builders found ways to monetize the empty lots.


AT
ROOSEVELT
$14,290 FHA
30 Year Mortgage
$540 Down
New 5-Rm. Cape Cods
Expansion attic. Twin dormers. Hot water heat. Three blocks to school. Convenient to all shopping and transportation.
Strictly Suburban Community
Plots 50x100 or more. Model located at Decatur St. and Underhill Ave.
GREENVIEW ESTATES
FR 8-4848 RO 4-6296
(2212)

Classified advertisement for Roosevelt, published in the February 21, 1959 issue of *New York Amsterdam News*.

These companies leveraged debt to build houses for Black customers. Greenview Estates offers a representative case, and property records reveal how its operation worked. First, an investor assembled land by purchasing lots one by one. Next, they sold the lots to Greenview Estates, and the company took out mortgages for all the properties. Once construction began, the company solicited buyers with promises of "New 5-Room Cape Cods."

The fact that the company advertised exclusively in the *New York Amsterdam News*, a historic Black newspaper, suggests the operation was designed for Black buyers. The company was essentially betting on Black desperation because if buyers could not be found, it would still have to pay the mortgages. If all went to plan, a buyer would make a cash down payment, which became the company's profit, and then assume the mortgage from Greenview Estates. In this way, a buyer never had to apply directly for a loan; the company acted as both homebuilder and mortgage broker. Greenview Estates built dozens of houses following this procedure.

The financial end-around allowed Black buyers to acquire brand-new houses. In 1958, Zeno and Alvis Richardson bought a two-story Cape Cod at 41 Jefferson Avenue. They assumed the mortgage from Greenview Estates, taken out by the company three months beforehand, and picked up the monthly payments where the company left off. A World War II veteran born to sharecroppers in Kentucky, Zeno had migrated to New York after the war, and Greenview Estates allowed him and Alvis to realize their suburban dream. "I came here because I wanted to buy a house," he later reflected, "and there was nothing available to us any place else."

Theron and Jonnie Banks purchased an identical Cape Cod four blocks away at 12 Andrews Avenue. High school sweethearts from Hempstead, they assumed the mortgage from Greenview Estates in 1960. Both couples eventually paid off their mortgages, and both stayed put for decades. Speculative builders offered yet another path to homeownership in the age of redlining. But without the backstop of federal mortgage insurance, Greenview Estates and then the buyers shouldered all the risk. Entire Roosevelt blocks were thrown up as gambles.

The very factors that made Roosevelt accessible also created frightful living conditions. As residents recognized, the lack of a water system left their homes without adequate fire protection. The waterless southeast section did not have fire hydrants, and the elementary school serving the area, which opened its doors to 500 children every morning, was protected by just one hydrant. The Utopia Community Civic Association, an organization of Black homeowners, protested these conditions. As chairman Martin L. Markham declared, "We feel it is the duty of the government to supply us with water and hydrants to fight fires in this community."

Water pipelines were the sort of basic infrastructure that developers installed when plotting subdivisions or that local governments built after there were a sufficient number of houses. Yet because Roosevelt embraced so many vacant lots, its residents were left to fend for themselves. Throughout the 1950s, Utopia members knocked on doors asking for down payments to finance a water system, but they never gathered enough signatures. Most homeowners already struggled to pay their bills. Few had enough savings for another major expense.

As many had feared, the lack of fire hydrants led to preventable tragedies. On a Sunday evening in February 1960, a fire broke out at an abandoned house in the waterless section. A total of 14 people had been living in the four-room bungalow, which lacked electricity. The blaze was reportedly started by someone using candles for light. All the occupants escaped except for 33-year-old Rosalie Taylor, who remained trapped inside.

Upon arriving, the Roosevelt Fire Department could not initially fight the flames because the nearest fire hydrant was several blocks away. They had to drag their hose lines through the woods and across debris-strewn lots. By the time the firemen reached the house, they discovered Taylor's charred corpse in the basement.

The horrific death sent shockwaves through the community, in part for its lingering mysteries. The property records listed no owner for the house, and Taylor had no known relatives. Still, for many the lessons were clear. "That building undoubtedly constituted a fire hazard," charged Markham. "We do not want a recurrence of what happened to Rosalie Taylor."

House fire in Roosevelt, 1965.

The inquest over the deadly fire continued long after the flames were extinguished. With public attention suddenly focused on the plight of tiny Roosevelt, the Utopia Community Civic Association renewed its lobbying campaign for water in the southeast section. In response, the Long Island Water Corporation agreed to lower the required down payment for installing water pipelines.

Working through local churches, Utopia members slowly gathered the funds in a year-long door-to-door canvas of homeowners. Finally, in the fall of 1961, nearly two years after Taylor's death, the utility company started tearing up the streets to lay water mains. The occasion elicited a mix of relief and bitterness. "Utopians have been working for years to end this without help from any political body," proclaimed Arthur J. Choice, the new Utopia president. Thanks to their efforts, every block now had its own fire hydrant.

But redlining and other racial exclusions persisted, forcing Black homeowners to keep relying on risky financial arrangements. Over the next decade, fires would tear through Roosevelt with alarming frequency. Only in retrospect 50 years later did Bradie Speller make the connection between unconventional mortgages, landlord conversions and the fires. "Shit!" he exclaimed during a 2019 interview. "The more I think about it, there were *always* fires in Roosevelt. This house would burn down. That house would burn down." $

Michael R. Glass is an Assistant Professor of History at Boston College. He is the author of Cracked Foundations: Debt and Inequality in Suburban America *(University of Pennsylvania Press), from which this article has been adapted.*

THE BANKER WHO MADE AMERICA

Metropolitan Museum of Art

Thomas Willing and the Panic of 1792

By Richard Vague

As the first president of the Bank of the United States (BUS), Thomas Willing presided over a fledgling but rapidly ascending American financial services industry in 1791. But the launch of the BUS—because of its sheer size—overwhelmed the nascent US economy.

There had been a credit-fueled boom and bust earlier that year, even before the launch of the BUS, in a stock-buying frenzy that had come with the initial offering of BUS stock and came to be known as "scrippomania." But with its actual opening and its considerable lending capacity, there would soon enough be another. And it was not just the BUS but also the continued chartering of ever more banks that was increasing the credit available to investors and speculators and bringing yet more booms and busts—in bank stocks, government bonds, land, canals and roads.

The country would follow this pattern from that point forward—fits of mania punctuated by collapse, all during a period of spectacular growth that would see the size of the US economy nearly triple from $287 million to almost $789 million in GDP in the 20 years the BUS would operate. These manic, credit-fueled bursts would bring euphoria—and then calamity—since the bankers would all too often lend more than appropriate in the throes of that euphoria.

But in 1792, America had not yet learned that lesson. Indeed, it would never truly learn it, as evidenced by the Global Financial Crisis of 2008. Willing, though, with a temperamental and practical prudence born of some 40 years in the tumultuous merchant trading business and 10

Portrait of Thomas Willing, the first president of the Bank of the United States, by Charles Willson Peale, 1782.

years in banking, would get singed in this 1792 boom and bust. From that he would learn the lesson well enough to guide the BUS intact and barely scathed through almost two decades of solid growth and profitability.

By early 1792, speculators everywhere had recovered from the 1791 bust—in part because Treasury Secretary Alexander Hamilton effectively scrambled to rescue markets from the very sins he had assured Congress did not exist—and they had reentered the market. So the price of BUS stock began to rise, along with the stocks of the handful of other American banks.

New speculations, projects, companies and banks were planned and started. There was a Pennsylvania canal company, a Boston bridge company and new banks in Providence, Boston, New Hampshire and Albany. In New York City alone, three new banks were planned; these were to be in addition to the Bank of New York and the BUS's New York branch, scheduled to open in April, although the New York legislature refused to charter these new banks due to opposition from its more radical members.

Not all states were as opposed to new commercial ventures as New York, however, and from October 1791 to April 1792, 17 new corporations were chartered in the United States—as many as in the previous seven years combined. All of them required capital, largely obtained by selling new shares.

The Lending Begins

This is where Willing and the BUS came in. Almost immediately after it opened its doors on December 12, it began lending money. Although those loans totaled only a small portion of its capacity, it was an overwhelming amount compared to the credit already extended by existing banks. Within a week, Willing and the BUS had made $683,078 in private-sector loans, a number that grew to $1.34 million by January 2, 1792 and to $1.88 million just a week later.

Because the BUS's other four branches—located in New York, Boston, Baltimore and Charleston—did not open until a little later in the year, this initial flooding of the lending market took place entirely at its main office in Philadelphia. By the end of January, less than two months into its existence, the Bank had an astounding $2.68 million of loans on its books. In comparison, all other banks combined had only about $5 million in outstanding loans, meaning that overall lending in the nation increased by roughly 50% in a matter of weeks.

These loans took the form of newly issued currency handed to the borrower, and this flood of new currency quickly had an impact; enough was being used to buy stock that overall stock prices surged in January.

Within a month of the BUS's opening, Thomas Jefferson complained that too much of the borrowing was simply fueling stock speculation: "The rage of gambling in the stocks, of various descriptions is such, and the profits *sometimes* made, and therefore always hoped in that line are so far beyond any interest which an individual can give, that all their money and credit is centered in their own views."

Though Willing was not known to be an overly accommodating lender, the giant size of the BUS compared to other banks meant that almost *any* lending it did had a material impact on the economy. In early 1792, the total loans outstanding among all 12 other banks was likely around $5 million. By the end of its very first year, the new BUS had extended $5.4 million in additional private-sector loans, as well as another $2 million in loans to the federal government. This represented more than a doubling of credit extended to Americans. It flooded markets with new funds that overheated national business activity.

Most of that $5.4 million in private-sector lending by the BUS was used to finance bills of exchange for merchant traders—just the type of lending Willing knew best. Nevertheless, some of its lending was in the form of "accommodation loans," unsecured loans that borrowers could use to buy government bonds and bank stock. Those accommodation loans only added fuel to the financial frenzy. Speculative activity picked up markedly, and bond and stock prices responded accordingly.

The previous summer's near-disaster in bond and scrip trading had somewhat chastened Philadelphians, but the more high-spirited traders in New York City seemed unfazed, shifting speculative activity northeast from Philadelphia to Manhattan, where the scale of the speculation and risk-taking was far grander. Any speculator thought to be successful was besieged by other New Yorkers who offered him fistfuls of money to "invest" on their behalf.

King of the Alley

A central character in this financial speculation was Assistant Treasury Secretary William Duer. Federal law prohibited Treasury officials from speculating in federal securities, and so Duer, always more interested in the financial intelligence he could glean than in the job itself, had resigned. The reality was that his avarice had long been known, and although "various forces favored Duer's appointment"—including his well-regarded head for business and his "reputation for efficiency" as a commissioner on the Board of Treasury during the previous three years—it was becoming increasingly clear that Hamilton had exercised poor judgment in hiring him.

At the end of 1791, Duer entered into a partnership with Alexander Macomb, a land speculator and one of New York's wealthiest citizens. The idea was to combine Macomb's wealth with Duer's insider knowledge and speculative talents for one year, then divide the profits. Duer began buying Bank of New York shares when rumors circulated that it would be taken over and converted into a branch of the BUS. If the rumors proved true, he figured, the stock price would skyrocket.

They also bought US bonds, reasoning that their value would go up, since the bonds would be needed for the purchase of the BUS's upcoming stock issue. This became known as the "Six Percent Club" because those bonds paid 6% interest. To attract more credit and investment, the two also fraudulently inflated their already significant assets.

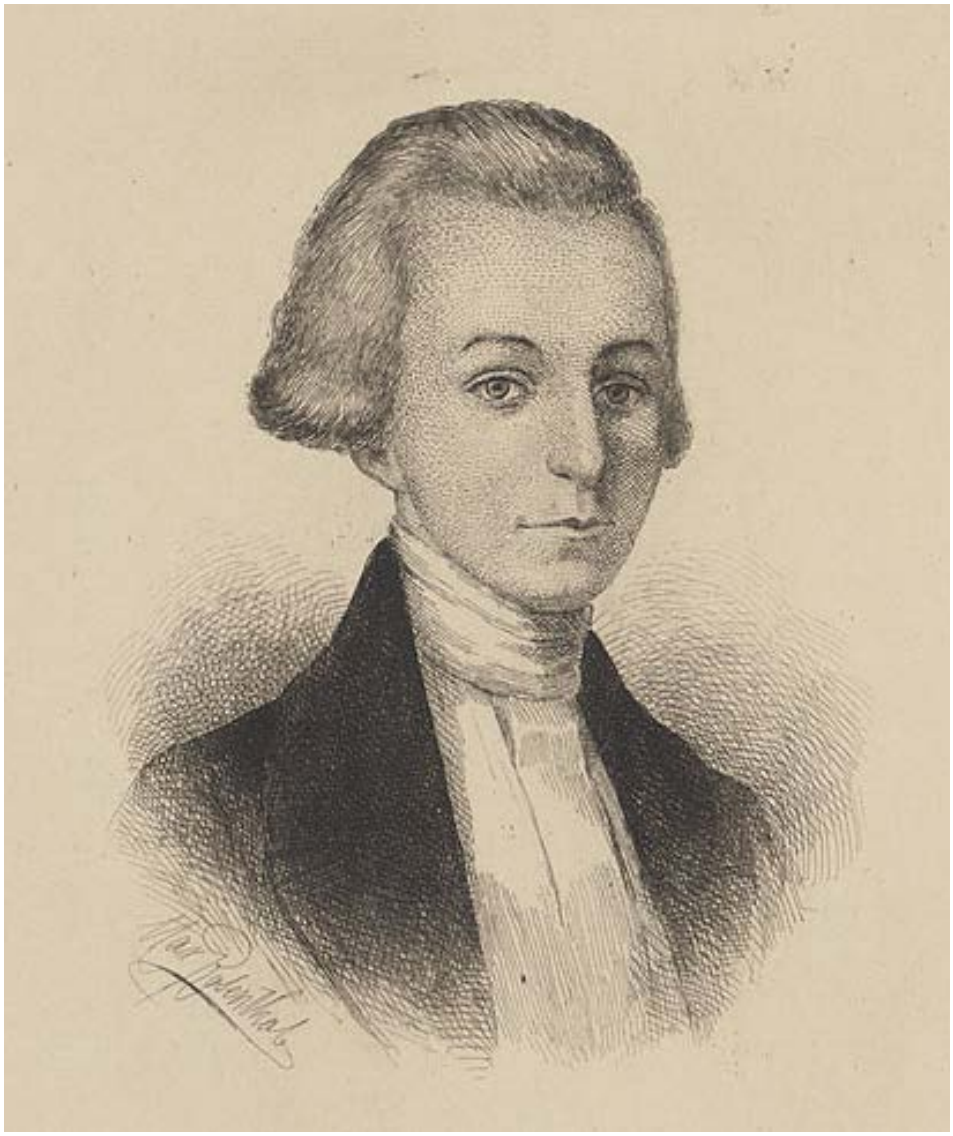
Duer was a snake; Jefferson derisively called him "King of the Alley." Even as he was buying Bank of New York stock with Macomb, he was "selling it short" in his own account. In other words, he was betting in public that the Bank of New York would be taken over, but betting in private that it would not. If the merger never materialized, Duer and Macomb would suffer losses, but Duer, separately, would see strong profits. Since he was betting with Macomb's money, Duer had nothing to lose. Did he have some inside knowledge that the BUS would not buy the Bank of New York and was simply withholding that knowledge from Macomb?

It is impossible to know, although given the size of the BUS board and Duer's contacts at the Treasury, it would not have been difficult to gain that information. Regardless, the sheer size of Duer's wagers indicated confidence in his short position.

Over the coming weeks, Duer fueled his speculations by borrowing half a million dollars on his personal notes—much of it from wealthy New Yorkers who had succumbed to the fear of missing out—but also from butchers, shopkeepers, widows, merchants, mechanics and even "a noted bawd, Mrs. McCarty." Among them was Walter Livingston, who lent him $203,000 at a time when few New Yorkers were worth over $100,000. It was a staggering sum.

Duer seemed infallible and was the center of attention, with many clamoring to give him their money to invest. He began to buy other bank stocks for future delivery, with no requirement to put up any cash. This was an extraordinarily risky strategy that meant he was in effect using 100% leverage; any downturn in the price could leave him in a position to have to buy them at the higher price—with money he did not have—and sell them at a loss.

Bank stocks and government bonds soared to a peak in January, exceeding any supportable valuation. It is both telling and startling to see that Americans were such eager and chronic speculators from the start. They gambled, won, lost, crashed and came right back for more.



Former Assistant Treasury Secretary William Duer was derisively known as the "King of the Alley," due to his market speculation that precipitated the Panic of 1792.

Hamilton Steps In

Amid the speculative euphoria, Hamilton reportedly instructed the BUS to rein in its lending, though it is hard to imagine it took much to persuade the ever conservative Willing. It is reasonable to assume Willing and his entire board had quickly grown to share Hamilton's concern and view. Given the small number of banks, it is also likely that Hamilton's former colleagues at the Bank of New York and Willing's former colleagues at the Bank of North America were in a similar dialogue with Hamilton.

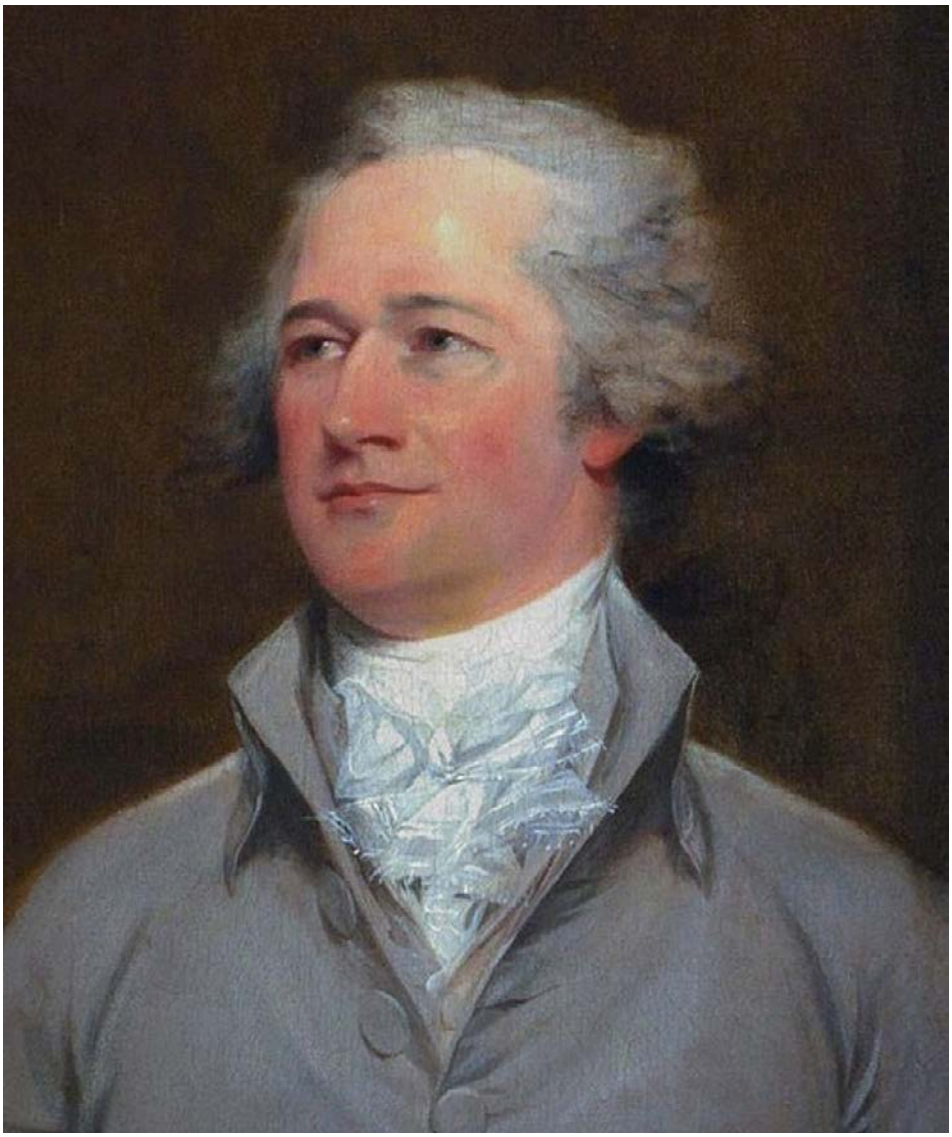
Thus, a sudden restriction of the credit that had previously been overextended by the BUS and other banks brought a panic. From December through March, the BUS's cash reserves declined, causing it not to renew nearly 25% of its outstanding 30-day loans. This forced many of its borrowers to sell other securities they owned to make repayment. The contraction happened quickly. From late January to March 9, the amount of the BUS's outstanding discount loans had declined by over 20%, from $2.7 million to $2.05 million. The act of reducing credit itself caused stock, bond and real estate prices to decline, since borrowers had to sell those assets to repay their loans, and the absence of new credit meant there were fewer new buyers of the assets.

The Bear Clique

Just before banks began to curtail credit, a number of short sellers joined forces in a "clique" of stock market bears to push the share prices lower. They were Jefferson's Republican allies who were opposed to the BUS and Hamilton. Anything they could do to damage Duer, Hamilton or the BUS would help the Republican cause by discrediting the Federalists, so they sold short all the stock they could muster to push down its price.

In a market as small as the nascent US financial markets, this maneuver had a disproportionate impact. In addition, they began to withdraw their large holdings of gold and silver from their bank accounts, which contracted the local money supply. This forced banks to call in loans to preserve adequate specie, which drove prices down further. In other words, they engineered a credit squeeze.

This squeeze, compounded by Willing's newfound caution at the BUS, meant that Duer and other speculators were suddenly at the mercy of the few remaining lenders willing to extend credit, who began ruthlessly raising their lending rates to as



Portrait of Treasury Secretary Alexander Hamilton by John Trumbull, 1792. Hamilton intervened in the Panic of 1792 by instructing the BUS to rein in its lending.

much as 1% per day. It was yet another new chapter in the ongoing, pitched battle between the Federalists and Republicans, the conservative merchant elites and the radicals, since Hamilton, Duer and other Federalists had been the ones to back the legislation authorizing the BUS and Federalists had been the most engaged in speculation—while Jefferson and the Republicans had opposed it.

The Banker's Dilemma

Willing and the other bankers who had facilitated the speculative boom were now killing it. This is always the banker's dilemma in a speculative boom: Speculation fueled by excessive lending causes prices to rise above sustainable levels. At the point when enough participants in a market recognize that prices are too high, the loans that were extended to buy assets at or near the top are at risk.

The paradox is that the sooner the bank calls such a loan, the more likely it is to avoid a loss, since the borrower will sell the stock purchased to repay the loan before the price of that stock has declined too far. But the very act of calling the loan—thereby making the borrower sell—forces prices further down. Of course, the bank can elect not to call those loans, and therefore not force prices down, but in so doing, the bank takes the risk that prices will go down anyway, as other lenders call loans or as savvy speculators sell. By not calling the loan, the banker may very well see higher losses than if they had called it quickly. And not calling the loan may even be letting the debt-based speculation get further out of hand, precipitating an even greater crash.

There is no good choice at this juncture, but calling the loans sooner is perceived by many lenders as the more prudent course. In the nascent US financial markets, some sort of correction was inevitable and necessary. The only two questions were how quickly, and who would be left holding the bag. Willing quickly corrected his overlending mistake and in the process gained wisdom about running a bank of this unprecedented scale.

The Scheme Unravels

On March 9, Duer failed to meet payments on some of his loans, and his scheme came unraveled. With Duer no longer able to buy shares in the BUS, its price plummeted, ruining him and others who had borrowed to speculate. He desperately tried to borrow more to cover his obligations, but even lenders charging 1% per day were unavailable to him. There were no loans to be had.

The next day, Duer was in prison and was soon joined by Walter Livingston, who had cosigned over $200,000 of his notes, and Alexander Macomb, who defaulted on debt on $500,000 in stock he had purchased.

Panic reigned; prices plunged. The next day, a reported 25 financiers failed in New York. Dozens of other speculators followed, finding themselves deep in debt with no way to pay it off. Mobs numbering in the hundreds surrounded the jail calling for the heads of Duer and his confederates.

Duer spent the rest of his life in debtors' prison, where he died on May 7, 1799. Much of the paper wealth that had been created was now destroyed, and public confidence in business was shattered. The entire financial community all across the new nation was affected. $

Richard Vague is a former bank CEO who also served as Secretary of Banking for Pennsylvania, and has authored a number of books on business and economics. He is the author of The Banker Who Made America: Thomas Willing and the Rise of the American Financial Aristocracy, 1731–1821 *(Polity, February 2026), from which this article has been adapted.*

THE RISE AND FALL OF THE CONGLOMERATES

By Martin Fridson

The term "conglomerate" is commonly applied to a wide variety of large corporations that are dominant in their industries. For example, in 2024 the *Daily Express US* described automaker General Motors as a conglomerate. And a 2025 *Wall Street Journal* article referred to "the breakfast-cereal conglomerate WK Kellogg."

Merriam-Webster, however, specifies that a company must be "widely diversified" to qualify as a conglomerate. Currently, just two companies in the S&P 500 are classified as industrial conglomerates—3M and Honeywell—the latter of which is in the process of splitting itself into three single-industry companies as this article heads to publication. With so few companies fitting the category, Standard & Poor's discontinued its Conglomerate subindex after 2001.

In their heyday in the 1950s and the 1960s, though, conglomerates included some of the best known and most controversial American companies. The controversy arose from their voracious appetite for acquisitions. Gulf & Western was satirized as Engulf & Devour in Mel Brooks's 1976 film *Silent Movie*. ITT became, in the words of the late business historian Robert Sobel, the "chief villain of American business" when it was revealed that the company played a role in the overthrow of Salvador Allende's leftwing government in Chile.

The anxiety generated by conglomerates was tied to merger mania, which has troubled the public every time it has appeared on the financial scene. In 1964, there were 91 mergers of companies with $10 million or more of assets; 68% of them involved conglomerates. Just five years later, the number of such mergers had more than doubled to 192, of which 84% involved conglomerates.

Further contributing to the moral indignation surrounding conglomerates was the fact that they were mostly led by outsiders from the business establishment of the day. Many were Jews or Catholics and they came from the South or Far West, not traditional breeding grounds for corporate CEOs in those years.

Companies

Prominent conglomerates during the 1950s and 1960s included Litton Industries, Textron and Ling-Temco-Vought. Later, companies such as ITT, General Electric, United Technologies, W.R. Grace and Martin Marietta carried on the conglomerate banner.

The conglomerates typically began as single-industry companies. For example, Royal Little's Textron started as a yarn producer in 1923 and later diversified into a variety of manufacturing businesses. After building up a sizable auto parts company, Gulf & Western's Charlie Bluhdorn yearned to get into something more glamorous. To that end, he acquired the Paramount movie studio and later added Desilu Studios. This enabled him to saunter around Hollywood with a starlet on his arm, making decisions about film productions and casts.

The Financial Angle

Conglomerates were known not only for the breadth of their operations, but also for their aggressive financial reporting practices. Capitalizing on the high price-earnings (P/E) multiple at which its stock traded, a conglomerate would use its shares as currency to acquire a low P/E company. The conglomerate might purchase a lower-growth or less-profitable company, but the immediate effect of the acquisition was that the conglomerate's earnings-per-share (EPS) rose. In a virtuous (or otherwise) circle, high EPS growth ensured that the market would continue to assign the conglomerate a high multiple.

The financial rationale for conglomerates was not only *growing* EPS but also a belief that the stock market would reward *steady* EPS growth. The idea was that by combining businesses that by their nature reached their peak and trough earnings at different points in the business cycle, a conglomerate would receive a higher P/E multiple than the individual companies could obtain on their own. Additionally, the allocation of capital would be centrally controlled, with the largest portions going to the highest-return businesses.

Fans of the conglomerates stated this proposition as "2+2=5." That is, the whole was supposed to be worth more than the sum of its parts. Conglomerates also had their detractors, however. They pointed out that they could diversify their stock portfolios on their own, without paying a premium for a company's stock to do it for them.

There were some instances in which a conglomerate acquired a moribund company and actually improved its operations. Those represented genuinely positive contributions to US economic performance. The biggest part of the story, however, was financial engineering.

At Gulf & Western, Bluhdorn stumbled upon a new twist. In the mid-60s,

he attempted to acquire Muskegon Piston Ring, but the company opposed his offer. Eventually, they negotiated a compromise that did not truly satisfy either party. Bluhdorn decided to sell his stock, but by then it had risen from his average cost of $17 to $32. Gulf & Western booked the gain as ordinary income, which had a better appearance in terms of reporting steady earnings-per-share growth than recognizing it as a one-time gain. (The fact that this accounting treatment was permitted may seem surprising, yet even today the presentation of income statement items is a matter of Securities and Exchange Commission guidelines, rather than specific rules.)

From his experience with Muskegon Piston Ring, Bluhdorn learned he could make out better by losing a takeover battle than by winning it. He proceeded to initiate a series of deals in which he took a beachhead position in a stock, then tendered for the whole company. His tender did not bring in enough shares for him to gain control, but it did drive up the target company's stock price, enabling Bluhdorn to sell his shares at a gain. He carefully avoided suggesting that his succession of abortive takeovers reflected an intentional strategy. That would have sounded like illegal stock manipulation.

Despite the questionable financial practices of some conglomerates, it would be unfair to paint them all with the same brush. According to Martha Clark Goss, who dealt with the widely diversified companies as a lending officer at Chase Manhattan Bank, Ben Heineman of Northwest Industries had a high reputation and was well-respected within the business community.

Antitrust Steps In

By and large, the conglomerates encountered no legal difficulties as a consequence of dubious financial reporting practices, but they did come in the crosshairs of the antitrust authorities. This may puzzle some readers. How can a conglomerate be in violation of antitrust laws if it owns companies in a variety of industries and does not have monopolistic control in any of them?

In 1948, before any of the companies discussed above became conglomerates, the Federal Trade Commission (FTC) became troubled by a new kind of merger. Its antitrust officials were familiar with vertical mergers, such as the earlier formation of Standard Oil through mergers across exploration and production, transportation, marketing and refining. They also knew about horizontal mergers like the ones that created General Motors through the combination of several previously independent automobile makers.

General Motors preferred stock certificate, dated October 13, 1916. While GM is often described as a conglomerate, Merriam-Webster specifies that a company must be "widely diversified" to qualify as a member of that category.

Now, however, the FTC was seeing mergers sometimes described as circular. These involved acquisitions of companies unrelated to the acquiring company's business. The FTC did not understand what the purpose of these mergers was. Its report on the new phenomenon offered three potential motives—spreading risks, investing large amounts of idle funds and increasing the number of products that could be sold by the acquirer's sales force or advertised along with its existing products.

Sobel found that the last two played no role in the actions of the one company that the FTC labeled a conglomerate in 1948. American Home Products (AHP) was involved in such diverse businesses as drugs, floor wax, coffee, Italian foods, lubricating oil, cheese products, insecticides and beauty products. Spreading risk, Sobel added, was of only minor importance to AHP or other early conglomerates.

If the hypotheses offered by the FTC were incorrect, what did account for the surge in diversifying acquisitions around that time? Ironically, antitrust legislation itself may have been partly responsible. The Celler-Kefauver Act of 1950 placed prior constraint on companies seeking takeovers that might appreciably lessen competition. The bill's authors had in mind horizontal and vertical mergers, so the law may have induced companies that were determined to grow through acquisition (for instance, to help boost the CEO's compensation, then as now partly a function of company size) to focus on acquisitions outside their existing businesses.

Even if widely diversified companies were not monopolizing any industry in which they operated, the FTC and the Department of Justice's Antitrust Division somehow could not shake the feeling that something was just wrong with conglomerates. Seeking to demonstrate that unrelated acquisitions were problematic, the FTC's 1948 report raised the specter of a giant conglomerate that could one day attain what it called "an almost impregnable economic position." If such a corporate colossus faced serious competition in one of its businesses, argued the FTC, it could sell below cost there, offsetting the losses with the profits of its other lines. That never happened with the conglomerates discussed herein.

The antitrust authorities never got the courts to buy into a rationale for attacking

conglomerates. A commission headed by University of Chicago Law School Dean Philip Neal criticized conglomerate mergers but concluded that nothing in any law then on the books prohibited them. The Neal Commission recommended new legislation that would bar companies with more than $500 million in revenue, or more than $350 million in assets, from acquiring leading firms in unrelated industries. That idea was later taken up by Massachusetts Senator Edward Kennedy, but the proposed law was never enacted.

In 1970, the District Court for Connecticut found for ITT in its attempt to acquire Grinnell, a plumbing and foundry business and also the number one US manufacturer of fire protection systems. The ruling read in part, "The Court declines the government's invitation to indulge in an expanded reading of the statutory language and holds the statute means just what it says." The explanation of the court's decision went on to say, "It proscribes only those mergers the effect of which 'may be substantially to lessen competition.'" This ruling indicated that changes to existing antitrust authority would have to come through new legislation rather than the courts.

With no such congressional action materializing, the antitrust authorities tried to go after conglomerates by pushing a theory of reciprocity. This was the idea that conglomerates would illegally induce their owned companies to buy and sell from one another on preferential terms rather than in competitive markets. The antitrust crusaders did not get very far with that argument, but they were undeterred in their battle against conglomerates. Sometimes they erected such a formidable wall of litigation that they succeeded in inducing a conglomerate to back off from a major proposed acquisition. This form of legal obstruction was especially effective if the conglomerate was simultaneously struggling with sluggish earnings and an excessive debt load.

Republican Richard Nixon won the presidency in 1968 on a pro-business platform, yet his administration launched an aggressive effort to block conglomerate mergers. This underscored the fact that opposition to conglomerates came from both the political left and the right. Leaders of the business establishment saw the new-form corporations as a threat to their own power.

Acroterion

Quintin Soloviev

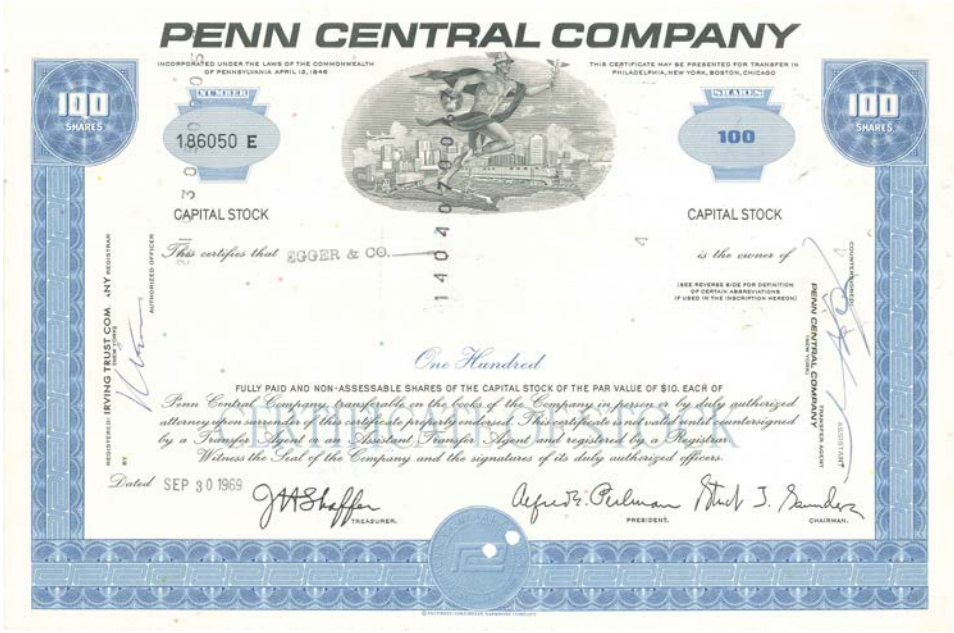
3M headquarters in Minnesota (top) and Honeywell headquarters in North Carolina (bottom). They are currently the only two companies in the S&P 500 classified as industrial conglomerates.

The Aftermath of the Conglomerate Era

Sobel dates the end of the conglomerate era—although not of conglomerates—to the 1970 bankruptcy of Penn Central Transportation Company. Penn Central had come into being through a railroad merger and subsequently diversified into a range of activities that included ownership of the Waldorf Astoria Hotel. The company's collapse cast unwelcome light on dubious financial reporting practices that it, along with other prominent conglomerates, had employed.

Meanwhile, the great bull market of the 1960s, immortalized as the go-go years, was ending with the biggest stock market decline since 1929–1933. The Dow Jones Industrial Average plummeted by 37% between December 1968 and May 1971 and the conglomerates' high-flying stocks fared much worse. Gulf & Western, for example, dropped by 85%. The game of using an overvalued stock as acquisition currency was over.

Increasingly, stock investors focused on the fact that the conglomerates had not delivered on the promise of making two plus two equal five. Quite the opposite;


PENN CENTRAL COMPANY
100 SHARES
186050 E
CAPITAL STOCK
100
CAPITAL STOCK
This certifies that EGGER & CO.
is the owner of
One Hundred
FULLY PAID AND NON-ASSESSABLE SHARES OF THE CAPITAL STOCK OF THE PAR VALUE OF $10. EACH OF
Penn Central Company, transferable on the books of the Company in person or by duly authorized attorney upon surrender of this certificate properly endorsed. This certificate is not valid until countersigned by a Transfer Agent or an Assistant Transfer Agent and registered by a Registrar.
Witness the Seal of the Company and the signatures of its duly authorized officers.
Dated SEP 30 1969
TREASURER
PRESIDENT
CHAIRMAN

Museum of American Finance

Penn Central Company stock certificate, dated September 30, 1969. The end of the conglomerate era is often tied to Penn Central's 1970 bankruptcy.

their stocks traded at a conglomerate discount, meaning that their market capitalizations were less than the collective value of their constituent businesses. Over the 13 years in which the S&P Conglomerates subindex existed, it produced an annualized total return of 1.42%. The comparable figure for the full S&P 500 was 12.82%.

Subsequent histories of the great conglomerates followed a recognizable pattern. The pioneer American Home Products spun off its food unit in 1996. After a series of aborted mergers, it changed its name to Wyeth in 2002 and was acquired by Pfizer in 2009. Ling-Temco-Vought demoted Jimmy Ling from his CEO post in 1970 and he subsequently resigned. The next year the company sold Braniff and Okonite as part of an antitrust settlement. In 1986, LTV, as it was then called, made the biggest US bankruptcy filing ever up until that point. The remains emerged from bankruptcy seven years later as mainly a steel producer named LTV Steel, which went bankrupt again in 2000. Its assets were acquired in 2001 by Wilbur Ross, who merged it with Weirton Steel to form International Steel Group.

Litton began exiting various businesses in the 1970s. It split into a military operation and a commercial company named Western Atlas. The military business was acquired by Northrop Grumman in 2001.

After Gulf & Western's stock price cratered, Bluhdorn said he was out of the acquisitions business. From that point on, he concentrated on Paramount, funneling funds to it from G&W's less glamorous businesses. After Bluhdorn's death in 1983, the company sold its auto parts, clothing, bedding and financial services businesses and renamed itself Paramount Communications.

Conglomerates and the Market for Corporate Control

Conglomerates faded from the limelight, but they left a legacy in what is known as the market for corporate control. Hostile takeovers were part of the conglomerators' toolkit. In the 1980s, the technique was employed in many acquisitions made by leveraged buyout (LBO) firms, nowadays dubbed "private equity." Author Donald Chew has written extensively about LBOs' role in wresting control of undermanaged companies and creating value by making them more efficient. (There were also cases of LBOs stripping the acquired companies of assets, leaving them in worse shape than before.) Ironically, the conglomerates themselves became targets of activist investors. The corporate raiders sought to profit from the conglomerate discount through takeovers premised on breakups.

Private equity firms ultimately emerged as more effective vehicles than conglomerates for succeeding in the market for corporate control. Their model was not to continue amassing companies indefinitely, but rather to dispose of them at a profit, either through sales to corporate buyers or to other LBO shops or through public offerings. With private equity firms such as KKR, Blackstone and Apollo now publicly listed companies, however, it is intriguing to note certain resemblances between them and the conglomerates of old, even if Standard & Poor's classifies them as Asset Management & Custody Banks. $

Martin Fridson is Chief Investment Officer of Lehmann Livian Fridson Advisors LLC. He is a longtime strategist and researcher whose innovations include the distress ratio, econometric modeling of the high yield risk premium and the equalized ratings mix approach to valuation. He has been a trustee of the Museum of American Finance since 2022.

The author thanks Martha Clark Goss for her valuable contributions to the research for this article.

Sources

Chew, Donald H. *The Making of Modern Corporate Finance: A History of the Ideas and How They Help Build the Wealth of Nations.* Columbia University Press. 2025.

Hallock, Kevin F. "The Relationship Between Company Size and CEO Pay." *Workspan*. 2011.

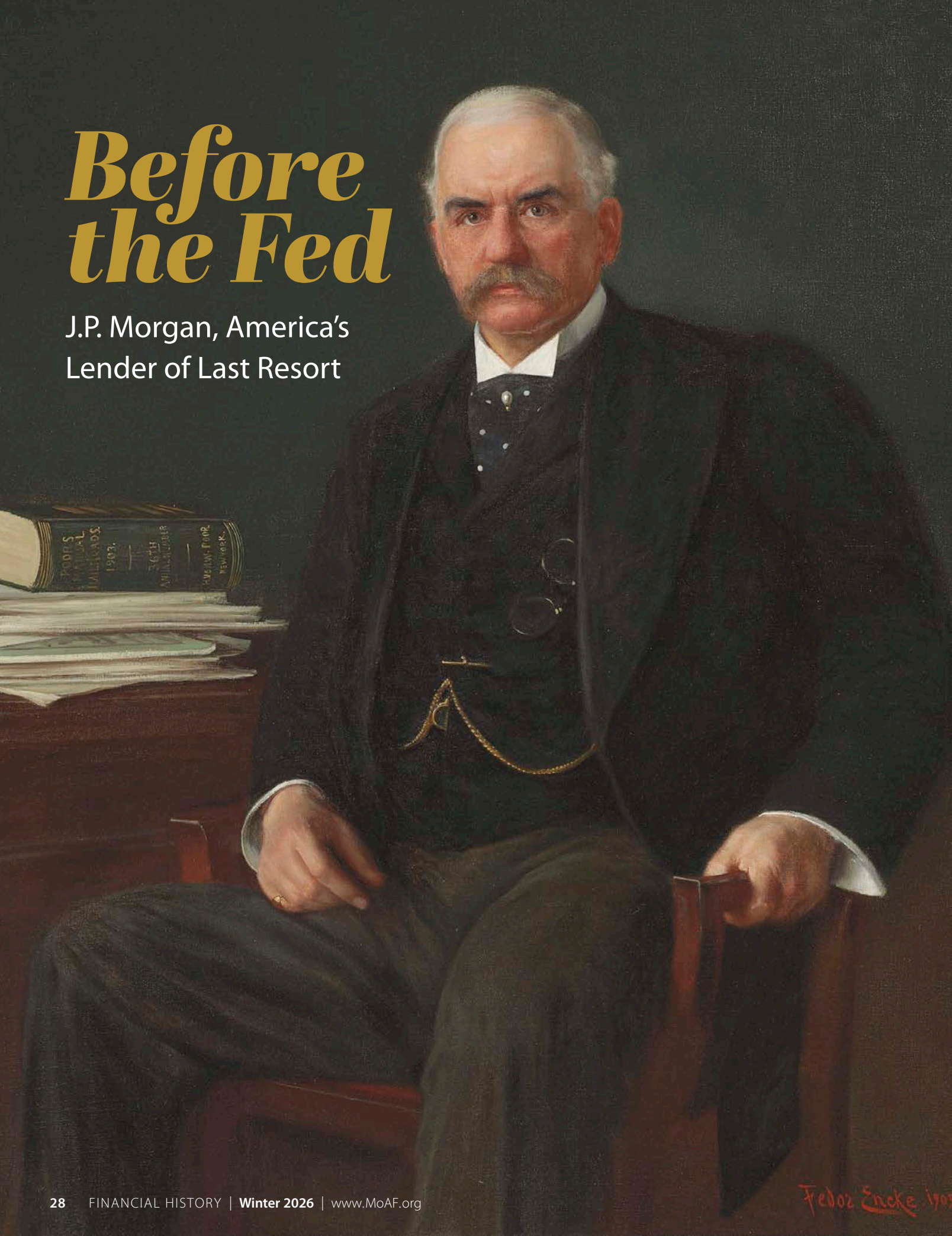
Sobel, Robert. *The Rise and Fall of the Conglomerate Kings*. Beard Books. 1981.

Thomas, Lauren and Ben Dummett. "Ferrero Strikes Roughly $3 Billion Deal for Maker of Froot Loops, Frosted Flakes." *The Wall Street Journal*. July 10, 2024.

Watson, Fraser. "F1 Releases Statement Explaining Decision to Give General Motors 11th Team." *Daily Express US*. November 26, 2025.

Before the Fed

J.P. Morgan, America's Lender of Last Resort



By Jon Moen and Mary Tone Rodgers

John Pierpont Morgan never enjoyed the security of working alongside a central bank in the United States. It took an investment banker like Morgan, steeped in syndicated loan experience and with exceptional ties to London, to connect the financial resources of the country to restore financial stability following a crisis before the founding of the Federal Reserve in 1913. In a span of 50 years, Morgan intervened more than 40 times in 10 financial crises—learning the art of last resort lending by trial and error. And many of the issues he faced remain relevant in the early 21st century.

Morgan experienced a wide range of outcomes as a result of his interventions. For example, his 1895 Gold loan to the US Treasury was every investment banker's dream: a simple initial term sheet, two quick albeit tough negotiation meetings, no argument about flotation, an oversubscribed offering and massive profit on the opening public trade. On the other end of the spectrum, the Panic of 1907 crisis was every investment banker's worst nightmare: a poorly written term sheet to save the trust company shadow banks, a mispriced loan, an unravelling loan syndicate as members retracted committed funds and—not surprisingly—horrendous losses that took years for Morgan to make up.

Distrust of Central Banks

In the late 19th and early 20th centuries, distrust of banks, especially central banks, was widespread in the United States. Such suspicion ultimately contributed to the glaring absence of a lender of last resort. Resistance to centralized authority had led to three domestic pools of purposefully disconnected reserves: the US Treasury, the banks and private individuals, none of which had formal ties to the even greater reserves of the central banks of England or France.

Portrait of John Pierpont Morgan by Fedor Encke, 1903.

Lord Nathaniel Rothschild, a British member of the Morgan syndicate during the 1895 US Treasury Gold loan, boosted Morgan's profits by driving a hard bargain while supplying the sought-after gold.

The US Treasury collected taxes but kept the proceeds in its regional vaults, not in banks. If the Treasury was running a surplus, it could choose to help a distressed bank, but that might come with the political cost of showing favoritism to some banks. Its uneven responses to crises ranged from depositing no funds into commercial banks during the Panic of 1884 to depositing more than $50 million into the banks in both the Panics of 1890 and 1907.

Banks organized by the National Banking Act (1863) or by state banking regulations kept reserves but limited their collective crisis responses to the cities in which they were domiciled. And private wealth resources were scattered all over the country with individuals deciding how to store wealth in a world lacking bank deposit insurance. This meant that lock boxes for cash and gold played an important role.

Of the three pools of disconnected reserves, the commercial banks—especially in large cities—were the most readily available to jointly respond to a financial crisis. Beyond the domestic sphere, the central banks of England and France could be called upon in a crisis, but their sovereign concerns were prioritized over America's, and their strict collateral requirements and protocols often made their reserves inaccessible to foreign borrowers.

Syndicates

The device that seems to have been most effective at quelling crises by coordinating responses from otherwise siloed reserves was the investment banker's syndicated loan, and Morgan was its maestro. Granted, lender of last resort instruments were not completely absent in the United States, but they were significantly circumscribed compared to those in nations with central banks. The prime example was a financial innovation in cities where banks formed clearinghouses to net the deposits and withdrawals between members—the Clearing House loan certificate. This became the key tool for providing general liquidity during panics.

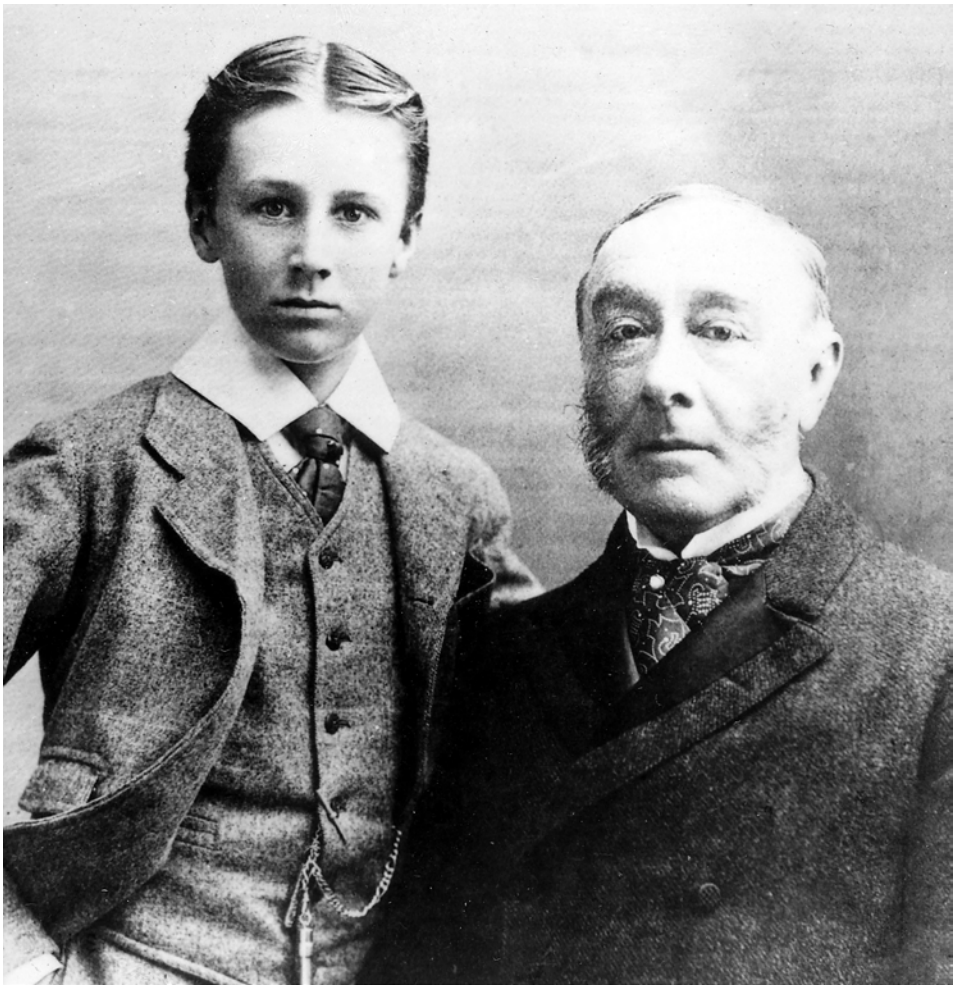
Designed to increase liquidity at banks and serve as collateral for maintaining loans during a panic, the certificate was a collateralized debt obligation of the entire Clearing House membership but issued by single member banks only as needed to maintain liquidity. If a member bank defaulted on a certificate, the risk of default was spread across the entire Clearing House, not just allocated to the defaulting, individual bank. Such risk sharing strengthened the lender of last resort ability of the Clearing House, providing a way to coordinate reserves within the commercial banking system. The syndicated loan also spread risk among its members, but by including participants from all nodes of the financial network, not just from commercial banks like the Clearing House device, it had potential to access more liquidity and more informed experts from investment banks both domestic and foreign, shadow banks, wealthy individuals and ultimately from English and French central bankers.

The investment banker's syndicated last resort loan did not require a society-wide consensus to form a lender of last resort role in a US central bank, thus making it appealing to a society loathe to cede power to a central authority. The syndicate was different from a group or a firm because it had a short, explicitly defined life; it was not an ongoing commitment, but rather, it was a temporary alliance. It lasted only as long as it took to complete the sale of a bond or equity to the end-investor, usually no

longer than a few months. A self-organized assemblage of agents, the syndicate formed their own rules each time an opportunity to raise funds for an entity arose. Rules were adapted to fit each situation.

Throughout his career, Morgan progressed from simpler transactions to more complex, syndicated ones, starting with a trade credit crisis in 1857, and advancing to funding short-term credit shortfalls for customers in the 1873 and 1893 panics. He orchestrated collateral swaps, extended maturities and constructed bridge loans, too, before dealing with a systemic currency crisis in 1895 and a shadow banking crisis in 1907, all of which tested his powers of persuasion to motivate collective action when his primary tools boiled down to profit and reputation.

While syndicated loans had been organized by many bankers in the United States, at least since 1812, unlike many others, Morgan invited subject matter experts as members of his routine loan syndicates that raised capital for corporations, primarily the railroads. The experts provided valuable information in a time preceding detailed financial statements, such as estimating cash flows to fund subordinated debt or equity dividends. Indeed, the riskier the syndication—be it lower-ranked debt, a reorganization or a flotation of equity capital—the more likely Morgan was to include subject matter experts, or at least to include individuals with interests aligned with the issuer.



Franklin Delano Roosevelt with his father, James Roosevelt, in 1895. James was one of Morgan's subject matter experts and was included in the syndicated loan to the reorganized Philadelphia and Reading Railroad.

James Roosevelt, father of Franklin Delano Roosevelt, was one of Morgan's subject matter experts. James was included in the syndicated loan to the reorganized Philadelphia and Reading Railroad. He served on the Board of Directors of his law firm's client, Consolidated Coal Company of Maryland, one of the largest anthracite coal mines that shipped on the Reading Railroad. This put Roosevelt in a position to know if Consolidated would continue to ship on the newly reorganized railroad, which was helpful for predicting the cash flow from the enterprise. As one would expect of hyper-localized experts, James only appeared in syndicates Morgan organized for the Philly Reading reorganization.

It is plausible that Morgan's recurring ability to include subject matter experts in routine syndicates could have been applied to the task of coordinating lender of last resort facilities. He included cordage experts in the loan to National Cordage in 1893, gold shippers in the Gold loan to the US Treasury in 1895, and recruited trust company presidents to resolve the Trust Company Panic of 1907. Morgan described how he customized syndicates when questioned about his routine practices during the Congressional investigation of 1912: "We distribute participations to those that we think will help the issue. Names that appear on one list will not appear on another."

To elicit participation in his last resort loans, Morgan had to price the risk of the syndicate loans in accordance with prevailing risk-free interest rates. As many of the participants were private sector actors, getting the pricing correct was vital for Morgan in the absence of a formal central bank backstop. His telegrams, syndicate books and testimony to Congress reveal that not all the crises he addressed were equally risky, and therefore, not surprisingly, he priced the bailouts differently.

Unlike the almost unlimited supply of 0% funding from the Fed today, Morgan faced a steep supply curve for crisis funding. The least expensive last resort loans were priced at the prevailing, albeit elevated, risk-free discount rate during a crisis of about 6% and were arranged when there was adequate time to produce exactly the type of collateral lenders required, such as bills of exchange to the Bank of England.

The middle type of loan was priced at a rate higher than the prevailing risk-free discount rate, by negotiation with lenders when collateral alone was not adequate to remove all risk. An example is the Gold loan

of 1895 that ultimately yielded about 12%.

The most expensive loans were created when there was almost no time to do any risk mitigation. In those cases, such as when syndicates auctioned liquidity at the New York Stock Exchange Money Post, and related collateral was in the throes of a fire sale, it was priced at exorbitantly high levels, up to 60% in 1907. Even though higher rates charged for last resort loans were likely intended to compensate investors for higher risk, profits were not guaranteed.

Gains and Losses

While many of the last resort loans organized over his 50 active years in the arena produced modest gains or losses, there were some outliers. The House of Morgan, led by J.S. Morgan & Co. in London, recorded a massive profit of $5 million on its syndicated loan to France to fight the Franco Prussian War in 1870-1871. Even though France lost the conflict, it honored its sovereign debt obligations, an outcome that was not widely expected at the time of the crisis. Then the Morgan syndicate earned about $2 million on the 1895 US Treasury Gold loan, aided by the hard bargain driven by the British syndicate member who supplied the sought-after gold, Lord Nathaniel Rothschild. He insisted on paying the United States less for the bonds than what Morgan had wanted to pay. Another contribution to the success of Morgan's 1895 loan was likely his inclusion of expert gold shippers in the American syndicate, a key distinction between Morgan's syndicate and both public debt offerings designed by President Grover Cleveland in 1894 to replenish the US Treasury's gold balances. The unsuccessful 1894 attempts were organized as auctions to the public without specifically including subject matter experts. Comparing Morgan's proportion of 15% expert gold shippers in his 1895 loan to the 5% proportion of gold shippers included in the first two dissatisfying loans, one can see how Morgan's business practices might have provided a much more effective outcome for the country than the politicians' transaction designs.

While the French and US Treasury bailouts were notable successes for the Morgans, their firm recorded substantial losses on other bailouts, including $400,000 on the syndicated loan to National Cordage of 1893 and about the same loss amount on the loan to Sovereign Bank of Canada in 1907. Indeed, the Morgans recorded staggering losses for the year of the Panic of 1907. After organizing the syndicates to auction cash at the New York Money Post early in the Panic, Morgan subsequently created two deals by novel uses of Clearing House loan certificates: one to keep afloat a too-connected-to-fail brokerage house and one to extend a short-term loan to the City of New York which was in jeopardy of missing payroll.

Cornell University Library

Portrait of Grover Cleveland, 1882. One contribution to the success of Morgan's 1895 loan was likely his inclusion of expert gold shippers in the American syndicate, a key distinction between his syndicate and both public debt offerings designed by President Grover Cleveland in 1894 to replenish the US Treasury's gold balances.

But it was the $20 million syndicated loan to bail out the trust companies, shadow banks experiencing runs that were upstart rivals to the commercial banks, that generated the biggest headaches for Morgan. Not only did he have to resort to using an ultimatum to convince the trust company presidents to come together to save two of their own, but he experienced more retractions of committed funds from syndicate members than in any of his prior last resort loan syndications. First, the trust companies were unable to source the $20 million among themselves as they had promised Morgan they would, raising only $14 million. Next, when Morgan had assembled a $6 million supplemental syndicate of banks to meet the trust company shortfall, four of those syndicate members got cold feet and temporarily backed out. Morgan had to inject a half million dollars of his own firm's funds to the supplemental syndicate, having mostly avoided tapping his firm's liquidity up to that point in the panic. Finally, adding insult to injury, the combined Trust Company syndicates took almost a full year to pay off, a costly administrative burden unlike most other crisis loans that were paid off within 90 days.

But none of those transactions on their own seem to have explained the staggering loss the firm recorded in 1907: $21,500,000. It wiped out almost all his firm's earnings recorded from the previous three years. How his loss was determined is not exactly clear, as accounting principles were not well defined compared to today. It may have been only unrealized losses on his holdings. In any case, it took several years for Morgan to recapitalize his firm through assessments on partners, enlistment of a new million-dollar partner, as well as adoption of a new syndication process, relying on steady commitments from two big commercial banks rather than customizing syndicate membership to the extent he did before the crisis.

Over time, restoring financial stability may have become increasingly costly for Morgan as the financial system became increasingly complex. Even so, the essence of his approach—surrounding a strong leader with competent associates willing to improvise—has endured through the Federal Reserve era. No matter the institutional framework, strong leadership will likely remain critical to maintaining financial stability in the future. $

Jon Moen is professor of economics in the Department of Economics at the University of Mississippi. Mary Tone Rodgers is a 30-year Wall Street veteran and serves as adjunct professor in the MBA program at the State University of New York at Oswego, recently earning the Chancellor's Award for Excellence in Teaching. They are the authors of Before the Fed: J.P. Morgan, America's Lender of Last Resort *(Cambridge University Press, 2025), from which this article directly borrows.*

THE BUILDINGS BANKS BUILD

CrossingLights

By E. James Smith

Whether viewed from Brooklyn Heights, New Jersey or the evening news, one can't help but notice the most recent addition to the New York City skyline. The new JPMorgan Chase Tower at 270 Park Avenue, which opened in October 2025, is New York's newest skyscraper, but it certainly is not the first to bear the name of a prominent financial institution.

Academic and economic theories often cite the construction of tall, imposing buildings by financial institutions and large corporations as an economic bellwether. The idea is that large buildings are constructed during times of prosperity and followed by a sustained financial downturn when nothing substantial is built. Andrew Lawrence presented this concept in his 1999 property research paper, "The Skyscraper Index: The Faulty Towers." Mark Thornton's 2018 book, *The Skyscraper Curse,* further developed the idea by linking Lawrence's Skyscraper Index to the Austrian business cycle theory, which claims to have predicted every major economic crisis in the past 100 years.

Carol Willis, author of *Form Follows Function* and the founder, director and curator of New York's Skyscraper Museum, points out that despite these theories, most commercial buildings are built as investments intended to be leased with income generation as their primary purpose. When an economic downturn occurs, it is no longer viable to create new office spaces that won't be rented.

It is generally the exception and not the rule that a corporation constructs a building for the sole purpose of its own use, without generating income by leasing a percentage of its floors. According to an article by Katie Burke in the real estate media outlet *CoStar News*, JPMorgan Chase has already exceeded the space in the tower. It is renovating a neighboring tower and renting space in another to accommodate its New York-based, five-day a week workforce. Therefore, it is unlikely there will be space for lease at 270 Park.

Artist's rendering of the JPMorgan Chase Tower at 270 Park Avenue during construction. The building opened in October 2025 and is New York's newest skyscraper.

Elisa Rolle

Façade of the Second Branch Bank of the United States, built in 1822, on display at the Metropolitan Museum of Art.

The Artistry of 270 Park Avenue

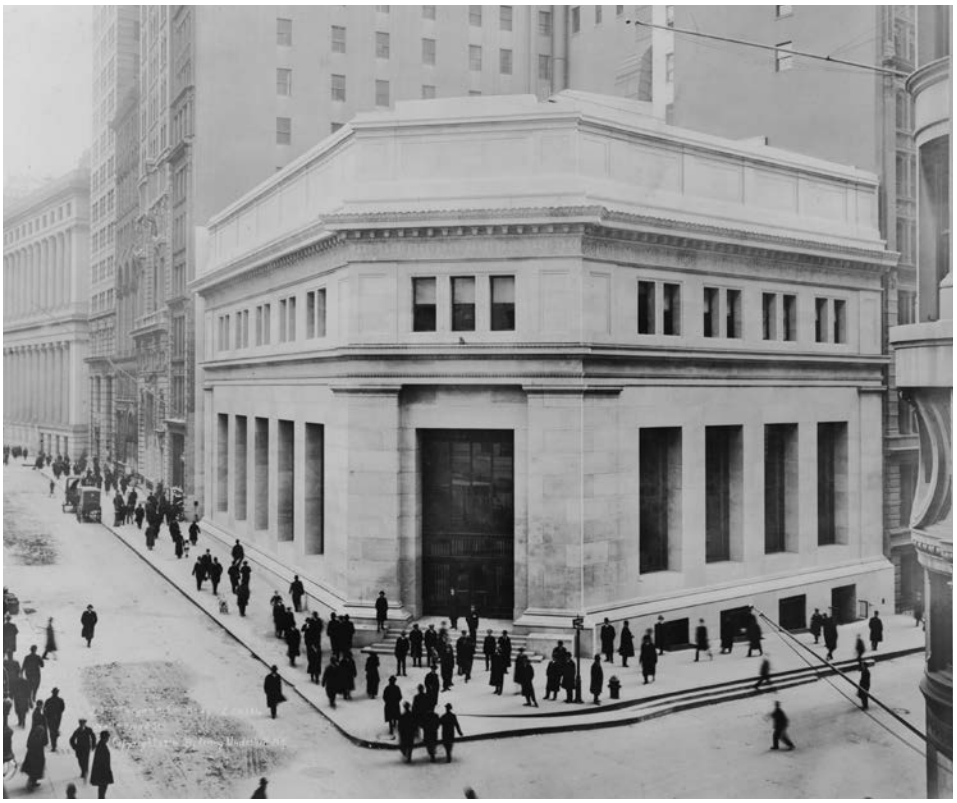
270 Park Avenue showcases many cutting-edge features that set new standards for what a modern workspace should look like in a 21st century, post-COVID office tower. 10,000 employees will enter the building daily through four grand entrances from the spacious, wrap-around plaza lying below the tower. According to lead architect Lord Norman Foster, founder and executive chairman of Foster + Partners, "The unique cantilevered structure, clad in bronze, delivers two and a half times the amount of public space at the base, including a garden, than its predecessor."

The new building incorporates five commissioned artworks, including *A Parallel Nature*, visible to pedestrians on Madison Avenue, by Maya Lin, who designed the Vietnam Veterans Memorial on the National Mall in Washington, DC. *Celestial Passage* by Leo Villareal, not visible at street-level, can be most appreciated when seen from afar, as it is a 360-degree light display covering the more than 1,300-foot

crown. Its gentle, shifting light patterns morph from abstract colors into images including the American flag.

Wind Dance, by Lord Norman Foster, is a giant American flag on a smooth bronze flagpole in the center of the main lobby. Powered by AI, the internal HVAC system switches its airflow so the flag will wave in the same direction as the exterior flags. Pedestrians walking by or people entering from Park Avenue will experience *Color Chase One* and *Color Chase Two,* by Gerhard Richter. These colorful companion metallic murals straddle the lobby's grand staircase and nicely frame *Wind Dance* breezing between.

The fifth new artwork is called *Living Building,* by Refik Anadol. The Turkish-born artist is well-known for creating stunning AI-based light displays for civic and corporate organizations around the world. The Refik Anadol Studio describes the piece as "a site-specific AI Data Sculpture that transforms the building into a living canvas of memory, environment and imagination," which is placed in the lobby elevator bank and depicts imagery of JPMorgan Chase's long history of financing New York City and its infrastructure.



Library of Congress

The House of Morgan building at 23 Wall Street, New York City, shown here the year it opened, 1914.

Early New York City Bank Buildings

Less than two miles away in the American Wing of the Metropolitan Museum of Art stands the façade of the Second Branch Bank of The United States, built in 1822. The mid-18th century English Palladian architectural style was intended to be a statement of the financial and political independence of the newly established United States. American architect Martin Euclid Thompson was tasked with building the new bank, which was located near Federal Hall on Wall Street.

According to an 1829 article in the *New York Mirror*, "the building is constructed in the most substantial manner, and is fireproof throughout." The article describes the "30-foot-high banking room surrounded by a gallery, vestibule and portico that add much to the beauty of the structure."

The American banking vision did not last long. The Bank War, a political battle about US banking philosophy begun in the late 1820s, led to the bank's charter renewal being vetoed by populist President Andrew Jackson, who viewed the federally controlled bank as unconstitutional. He transferred United States funds to various state banks and the Bank of the United States eventually ceased to exist.

In the 1850s, that building became the US Assay Office, where gold and silver from the American western expansion to the West Coast were evaluated for purity before being sold. By 1915, the former Second Branch Bank had outlived any practical use by the US government and was demolished. Fortunately, Robert W. de Forest and his wife Emily Johnston, who had strong ties to the Metropolitan Museum of Art, were able to save the front façade. It was kept in storage until 1924, when it became the entrance to the newly constructed American Wing of the Met. By 1980, it was enclosed by the Charles Engelhard Court, forever protecting it from the elements.

After a century of financial turmoil precipitated by the American Civil War and the Industrial Revolution, the US government chartered the Federal Reserve banking system in 1913. The New York branch opened in 1924 and to this day houses the largest gold depository in the world 80 feet below street level.

Also in 1913 and 1914, J.P. Morgan built "The House of Morgan" at 23 Wall Street for the banking business of J.P. Morgan & Company. The unobtrusive structure, which survives today, was constructed from the same pink marble he used to build his library on Fifth Avenue. It was a simple neoclassical design and sustained damage from the unsolved 1920 Wall Street bombing, presumably by a group hostile to American capitalism. Famously, the bank did not repair the exterior damage caused by blast debris as a statement of defiance against the unknown attackers.

One Chase Manhattan Plaza

By the mid-1950s, Chase National Bank and the Bank of Manhattan had merged and needed a centralized headquarters for its fragmented workforce. David Rockefeller, the new bank's executive vice president for planning and development, tasked architectural firm Skidmore, Owings & Merrill (SOM) to design a new tower and public plaza. According to SOM, "The tower was not only the first International Style building in Lower Manhattan, but also one of the first major buildings to be erected in the Financial District since the Great Depression."

In 1961, One Chase Manhattan Plaza opened to acclaim. The boxy tower stood out and permanently changed the Lower Manhattan skyline. The new plaza was a

Jim Henderson

The plaza and sunken garden at One Chase Manhattan Plaza, which opened in 1961. Today the building is called 28 Liberty or Fosun Plaza.

refreshing departure from the narrow cavernous streets of the Financial District. It was designed by sculptor Isamu Noguchi, who created a circular sunken rock garden in the center. Ada Louise Huxtable, famed architecture critic writing for *The New York Times*, commented, "These are ambitious structures of character and quality… they aspire to the dual role of company trademark and work of art." Indeed, the opening of One Chase Manhattan Plaza ushered in a new era of downtown development that included the World Trade Center, Battery Park City, South Street Seaport and other corporate towers.

Citicorp Center

Leaving the Financial District in 1961, First National City Bank planned to consolidate its employees in midtown and transform into Citibank. SOM also designed and built their new headquarters at 399 Park Avenue, a modern rectangular 41-story office tower that blended in with neighbors like the Seagram Building and helped to establish a new business corridor on Park Avenue. The move was successful and by the 1970s, Citibank needed to expand. They began to acquire nearly all land between Lexington Avenue, Third Avenue, East 53rd and East 54th Streets. This included an old church building belonging to the parish of St. Peter's Church, which bargained to sell its land in exchange for a new church at the same location to be built by Citibank.

Citicorp Center (the official name for the complex at the time) was designed by Hugh Stubbins & Associates and was dedicated on October 12, 1977. The sleek, bright new tower forever altered New York's skyline with its sloping, angled roof. The architects also created a spectacle at street level by propping the building up on four centrally located stilts. Confining the tower's footprint to four 24-foot columns allowed a rebuilt St. Peters Church to remain on its original corner and, according to *Architectural Record*, "the design permitted the construction of the 9,000 square foot sunken plaza located 12 feet below the street level and interconnected with a new subway station."

These amenities were a welcome departure from the sterile corporate building style of the time that would often force pre-existing small businesses to close. These public-facing inclusions, along with preserving St. Peter's Church, were developed by the Urban Design Group and The Mayor's Office of Midtown Planning, both started by then mayor John V. Lindsay. Developers were encouraged to build significant usable public space in exchange for permission to build higher towers with more floors.

The Citicorp Center is also noted for its innovative, but concealed, steel chevron support system, and it is the first tall building to employ a tuned mass damper (TMD). The TMD is a giant hanging weight at the top of the building used to counteract the forces of wind and lessen the building's sway during storms.

No mention of Citicorp/Citigroup Center, now called 601 Lexington Avenue, is complete without discussing the structural crisis that followed immediately after the building opened. The story went untold for nearly 20 years until "The Fifty-Nine-Story Crisis," by Joseph Morgenstern, was published in *The New Yorker* in May 1995.

A student who was writing a paper about the building contacted structural engineer William LeMessurier. After the student questioned the building's ability to withstand strong winds approaching from an angle, rather than straight on, LeMessurier went back over his calculations and determined a large enough storm could indeed topple the building. While doing this, he learned that to save money, the contractor substituted bolts

Epicgenius

St. Peter's Church at the base of Citicorp Center, on the corner of 3rd Avenue and 54th Street in Manhattan, April 2021.

Ivan2010

Bank of America Tower in Midtown Manhattan was the first skyscraper to be certified LEED Platinum, the US Green Building Council's highest honor.

for the prescribed stronger welds at critical steel joints, making the building even more vulnerable to high winds. Quietly and secretly, welders were brought in at night when the offices were closed to weld new steel reinforcement plates throughout the structure. This story has been the subject of many books, articles, documentaries, interviews and even lectures by LeMessurier. Thankfully, Citicorp Center was spared disaster and, though no longer a showplace for Citigroup, the innovations of the tower, church and subway-linked plaza continue to leave their mark on a now thriving neighborhood nearly 50 years after construction.

Bank of America Tower

In addition to design and structural improvements over the years, corporate buildings of the 21st century have aspired to greater environmental standards. Since the launch of the US Green Building Council's Leadership in Energy and Environmental Design (LEED) certification in 2000, buildings have been designed with focus and attention on a building's efficiency and environmental impact. In 2009, Bank of America Tower, or One Bryant Park, opened on West 42nd Street and 6th Avenue. This was the next large-scale attempt to construct a building that was environmentally sustainable.

The Durst organization, with Bank of America as anchor tenant, hired architectural firm CookFox to design and build the new 55-story tower. This was the first skyscraper to be certified LEED Platinum, USGBC's highest honor. Having drawn inspiration from the New York Crystal Palace—built in what is now Bryant Park for a world exposition in 1853—Bank of America Tower represents a giant quartz crystal, from street to spire.

CookFox described the philosophy that informed their approach. "Drawing on concepts of biophilia, people's innate need for connection to the natural environment, the vision was to create the highest quality modern workplace by emphasizing daylight, fresh air and an intrinsic relationship to the outdoors." The outdoors in this case was Bryant Park, diagonally across the street, which after remaining true to the Manhattan grid at the base, the tower twists to face.

CookFox highlighted some of the features that helped certify the Bank of America Tower as LEED Platinum. "The building's floor-to-ceiling glass curtain wall minimizes solar heat gain through low-e glass and heat-reflecting ceramic frit while simultaneously providing exquisite views." Another feature of the building, which has become commonplace in new construction, is water conservation utilizing recycling, harvesting rainwater from the rooftops and waterless urinals.

The HVAC system cools the building's air with ice frozen in huge tanks below ground, overnight when energy is less expensive, then distributed during the workday through floor vents with individual controls. The building even contains its own mini-power plant that reduces the building's annual electricity usage.

Rick Cook, lead architect for the project, wanted to make some physical connections between his new building and the environment. The interior lobby has Jerusalem stone blocks containing ancient fossils and the canopy over the sidewalk on Sixth Avenue has three astronomical cut-out notches that allow shafts of light directly into the lobby during each solstice and equinox. The ceiling of the lobby and canopy is finished with renewable

Percival Kestreltail

Demolition of the original JPMorgan Chase building at 270 Park Avenue, April 2021.

bamboo, while the lobby doorhandles are carved from white oak.

As with Citicorp Center, the architects of Bank of America Tower sought to create usable public space as they attempted to feather the building into its Bryant Park neighborhood. One challenge was to preserve the landmarked façade of the historic Henry Miller/Stephen Sondheim Theatre which stood on the building's footprint. The front was propped up with a steel armature while a modern theatre was built within the Bank of America Tower, eventually reattaching to the restored façade, complete with a billboard on top.

This also led to the creation of Anita's Way, a public passageway that connects 42nd and 43rd Streets, serves as an alternative entrance to the theatre and is sometimes used as a public performance space. The Urban Garden Room, designed by Margie Ruddick, is a privately owned public space (POPS), which serves as an extension of Bryant Park. Floor to ceiling windows surround the quiet, interior garden with brilliant light, public seating and several large plant-covered sculptures. Ruddick explained, "we designed four living green sculptures that transform the tall, narrow room into a contemplative space." The building's public-facing designs also included a new glass subway entrance on Sixth Avenue that blends in seamlessly with the architecture of the lobby.

The Bank of America Tower did have its detractors. In July 2013, after the building had been open for a few years, *The New Republic*'s article, "Bank of America's Toxic Tower," criticized the LEED certification vs. real-world statistics. It claimed that LEED certifications, although admirable and good for publicity and tax breaks, had nothing to do with measuring a building's energy efficiency once it was completed and occupied by the tenant. Despite this, Bank of America Tower stands as an example of environmental design that will continue to inspire and influence future environmentally conscious corporate construction.

JPMorgan Chase Tower

The merger of JP Morgan and Chase Manhattan Bank in 2000 triggered a series of events that would culminate in the present skyscraper at 270 Park Avenue. The original tower, again designed by SOM, was built by the chemical company Union Carbide in 1960. They later decided to move their headquarters to Connecticut, and by 1983 Manufacturers Hanover Trust had taken ownership of the building. By 1991, Chemical Bank absorbed Manufacturers Hanover and made 270 Park Avenue its new home. In 1995, Chemical Bank merged with Chase Manhattan, which migrated its staff from One Chase Manhattan Plaza—leaving its namesake plaza behind.

By 2000, newly merged JPMorgan Chase already exceeded the tower's capacity, and space was leased in various other locations. By 2018, after years of planning, zoning changes, air rights purchases and challenges by preservationists, the firm announced it would dismantle the former Union Carbide building and replace it with a grander headquarters at the same location.

At the time, the Union Carbide building was the tallest structure to be voluntarily dismantled, although this distinction has since been surpassed. But that was only the first challenge. As with the original tower, the new tower would not have a basement, but instead would straddle the tracks leading to Grand Central Terminal on stilts.

JPMorgan Chase boasts that 270 Park is an all-electric tower with energy sourced from an upstate New York hydroelectric power plant. It will also use AI to power environmental controls, such as air quality and lighting throughout the office space. As with most office towers since the Bank of America Tower, 270 Park is designed to achieve both a LEED Platinum certification and a WELL Health-Safety Rating.

Considering the long list of banks that merged to eventually become JPMorgan Chase, 270 Park Avenue is American banking history in skyscraper form. With its energy efficiency, artwork, public plaza and bright office space, it is the latest grand statement by a financial institution to be made in New York. $

E. James Smith's company, Time-Lapse NOW, produces artistic time-lapse videos for developing construction projects. He resides in New York City's East Village, where he writes articles about architectural history, creates documentaries, edits financial podcasts and records albums with the E. James Smith Band. He can be reached at ejames@ejamessmith.com.

ANDREW ROSS SORKIN
NEW YORK TIMES BESTSELLING AUTHOR OF
TOO BIG TO FAIL
1929
INSIDE THE GREATEST CRASH
IN WALL STREET HISTORY–
AND HOW IT SHATTERED A NATION

1929: Inside the Greatest Crash in Wall Street History—And How It Shattered a Nation
By Andrew Ross Sorkin
Viking, 2025
592 pages

This well-researched book does indeed take the reader "inside the greatest crash in Wall Street history." More significantly, it commendably discusses "how it shattered a nation." Journalist and author Andrew Ross Sorkin devotes Part I to a compelling account of events from February to December 1929. Then, he makes an insightful contribution to the literature of the crash in Part II that discusses its aftermath from September 1930 to June 1933.

Even at 444 pages of text, this narrative flows smoothly. Each chapter is a series of short descriptions of activity. Most also include brief profiles of various participants in the drama. Sorkin's story proceeds chronologically. He begins with the account of J.P. Morgan & Co. senior partner Thomas Lamont's February trip to France on the *Aquitania.* Even while preparing to deal with the problem of German war reparations, Lamont was working on Morgan's latest "friends of the firm" discounted offering of a speculative holding company. The offering was perfectly legal; but it was also representative of the type of underhanded Wall Street business practice which Sorkin explores.

Another early chapter describes the disagreement over the level of interest rates between representatives of the Federal Reserve Board and leading bankers. When lobbying the Board failed to have its desired effect, National City Bank President Charles Mitchell undermined the Fed's policy by announcing his intention to freely lend money to all parties. He was intent on blunting a late March stock market decline that was interrupting a period of speculative frenzy.

Sorkin's lead-up to the climactic stock market action of late October is compelling. But it is not clear whether the author achieved his goal of learning more than has been previously reported about the feelings and decisions of the story's main actors. His 42-page account of the period from October 19 to 29 is as breezily written as any other section. As expected, it does not appear to break any new ground.

The author's choices of issues to discuss in Part II are interesting. Without writing specifically about the Great Depression, he succeeds in telling how much the stock market crash affected the public's perception of Wall Street as that economic disaster continued to unfold. Bankers and brokers went from being the most revered group of men in the nation to one of the most reviled. More than many other works about the crash, *1929's* Part II clearly describes that shift. It does so partly by detailing Ferdinand Pecora's investigation of Wall Street's business tactics and Charles Mitchell's trial for income tax evasion.

He also tells how Senator Carter Glass worked on legislation that would "put Wall Street in its place once and for all." Even the well-informed reader may be surprised to learn the backstory of the separation of commercial and investment banking contained in the 1933 Glass-Steagall Act. It was not the senator's idea, but the contribution of Chase National Bank President Nelson Aldrich. And it was not a widely recommended act of reform but a swipe at the strong market position of J.P. Morgan & Co. by a less successful competitor.

In his Afterword, Sorkin reinforces some important points related to the second part of the book's subtitle. Life in America felt different after the crash. That event was destabilizing; it put capitalism under a microscope and it shattered the country's trust in both financial professionals and their regulators. He points to the self-serving nature of the club-like New York Stock Exchange, the fragmented and undercapitalized characteristic of the national banking system and the behavior of the relatively new and untested Federal Reserve as important factors that contributed to an event he believes was preventable. One does not have to agree with his commentary on the functions of markets, the lessons of history or the reality of human nature to praise the bulk of his entertaining and worthwhile effort. $

Michael A. Martorelli is a Director Emeritus *at Fairmount Partners in Radnor, Pennsylvania, and a frequent contributor to* Financial History. *He received his MA in History from American Military University.*

The Land Trap: A New History of the World's Oldest Asset
By Mike Bird
Portfolio/Penguin, 2025
326 pages, with notes and index

It's widely known that there is not enough affordable housing in many places in the United States, and around the world. Rents are high, and the "dream" of home ownership is becoming just that for many. Wages and savings have not kept pace with the continued rise in real estate prices. If you want to sell, great, but you still need somewhere to live—and it is expensive.

A situation like this ought to right itself pretty quickly. After all, capital flows toward the highest return. But because of regulation, local opposition, high construction costs, land scarcity, etc., relief appears to be happening at a glacial pace. Escalating real estate prices have been great for some, but for many, dramatic increases in land prices has slowed the expansion of cheaper housing and stymied opportunities to own.

How do we find a solution to this challenge without destroying the massive wealth already built into legacy real estate holdings? In *The Land Trap: A New History of the World's Oldest Asset*, reporter and podcast host Mike Bird tries to make sense of this "land trap" challenge. Bird takes the reader on a tour—both historical and geographic—of how investors, governments and markets have viewed real estate over time. This includes a primer on the economic thinkers and planners who've grappled with the issues of land ownership. There is much history here, but a large part of the book focuses on recent experiences. Although light on conclusions, *The Land Trap* is well written, colorful and timely.

Bird first reminds the reader of real estate's allure as an investment. Land ownership has for centuries conveyed success and status. However, there are attributes of real estate that make it trickier than other assets. Except on a small scale (for example, Singapore), you can't make more land; what's here is here. And unlike goods or commodities, land can't be moved to where it might bring more value. Finally, the value of the asset depends on the attractiveness of its surroundings. The puzzle of how to harness land's intrinsic value so it can be used to spur investment and growth—to monetize a "stranded asset"—is a recurrent theme in the book.

In the 19th century, land was as hot a public issue as it is today. Land ownership was the preserve of the rich, and the growing worker classes were excluded. At the same time, governments sought some way to tap into growing land values to increase revenue. Enter Henry George, a crusading US newspaper reporter-turned-reformer, who advocated for a single tax on land to raise revenue and expand ownership. Although less well known today, George's ideas excited many in and outside the United States, including voters in New York City where George was a losing candidate for mayor in 1886.

Using George's ideas as a pivot, the book outlines approaches to land assets and land reform around the world from the beginning of the 20th century through today. George's followers met with Lenin (and Stalin) at a 1907 conference in London, but the Bolsheviks had little time for his gradualist perspective. Killing kulaks and collectivizing land was more to their taste. Sun-Yat Sen tried to channel George, but he died too early to see his land reform ideas in China gain traction.

The upheaval of World War II re-energized efforts to reform land ownership and uses. Wolf Ladejinsky, a Ukrainian-born US agrarian economist, was given a wide-ranging brief to reorganize post-war Japanese land ownership with the aim of enhancing democracy and capitalism. Ladejinsky bopped around Asia—Japan, Korea, Vietnam and India—for two decades, trying to broaden real estate ownership and decrease the power of entrenched landlords. His efforts worked in some places and failed in others. Most of the failures stemmed from governments caught between pleasing peasant farmers and richer landlords.

As China liberalized its economy, Bird writes, real estate took center stage. Individuals, eager to invest in anything, poured money into construction schemes. Local governments, looking for revenue, spurred intermediaries to build…and build…and build. Evergrande, a now bankrupt Chinese real estate development company, is used as a poster child for the frenzy. The bubble (maybe the biggest ever) is still there, says Bird, with neither investors nor governments willing to book the losses necessary for it to pop.

The book covers a lot of territory, but there are some relevant issues that are given less attention. The saga of how mortgage-backed securities seduced the smartest people around and led to the 2008 US banking crisis gets only a cursory mention. There was a pervasive belief that people *always* paid their mortgages. Until they didn't. And little is said of the demographic impact of people living longer and staying in their homes, rather than selling to new buyers.

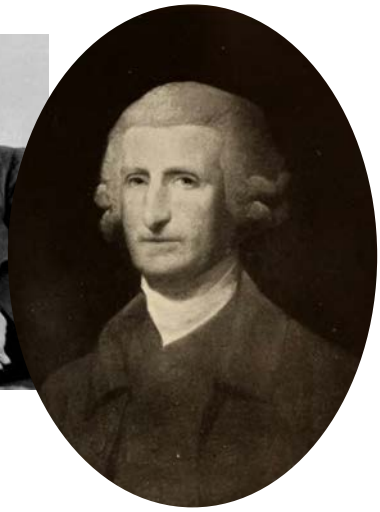
The central thesis of the book is that we are in a "land trap" where high prices lock out many, but governments and markets can't afford to see dramatic contraction in value. Bird admits it is going to be tough to get out of the trap and offers modest proposals to alleviate the worst of it: expand the housing supply, re-visit Henry George's ideas on land taxes, stop subsidizing real estate investment over development, etc. But land still casts a spell over us. As Mark Twain is quoted as saying, "Buy land, they ain't making it anymore!" $

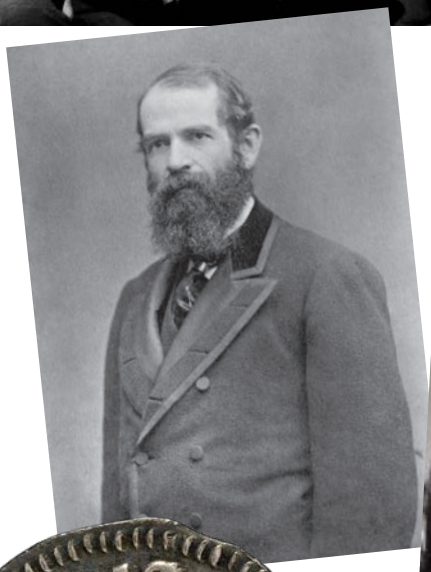
James P. Prout is a lawyer with more than 30 years of capital market experience and is now a consultant to some of the world's largest public companies. He can be reached at jpprout@gmail.com.

TRIVIA QUIZ

HOW MUCH DO YOU KNOW ABOUT FINANCIAL HISTORY?

1. Who was the first president of the Bank of the United States?
2. Which company completed the construction of New York's newest skyscraper in October 2025?
3. Which two Gilded Age financiers had warrants issued for their arrest in connection with the battle for the Erie Railway in 1868?
4. What American company's 1970 bankruptcy signaled the end of the conglomerates era?
5. What former Assistant Treasury Secretary caused the nation's first panic in 1792?
6. Which US President's father was one of J.P. Morgan's subject matter experts for the syndicated loan to the reorganized Philadelphia and Reading Railroad?
7. What are the only two companies currently classified as industrial conglomerates in the S&P 500?
8. What was the earliest colonial coinage, minted by the Massachusetts Bay Colony beginning in 1652?
9. Where in New York City can the façade of the Second Branch Bank of the United States currently be found?
10. What 1886 NYC mayoral candidate advocated for a single tax on land to raise revenue and expand real estate ownership?





1. Thomas Willing **2.** JPMorgan Chase **3.** Jay Gould and James "Jubilee Jim" Fisk **4.** The Penn Central **5.** William Duer **6.** Franklin Delano Roosevelt **7.** 3M and Honeywell **8.** Pine tree shilling **9.** The Metropolitan Museum of Art **10.** Henry George

Retirement A to Z:

Financial Education Series for Adults

virtual series

Join the Museum and the New York Public Library's Thomas Yoseloff Business Center for a free 11-part virtual series on retirement planning. The series aims to provide participants with the information needed to help them secure their finances for the future.

The speakers include professionals from **FINRA**, the **Social Security Administration**, the **Health Insurance Counseling and Assistance Program**, the **US Department of Labor** and an **elder law attorney** to guide you through the process. The series kicks off on Tuesday, January 20, at noon and continues **every Tuesday at noon** through March 31.

Programs Include:

January 20:	The Importance of Retirement Planning
January 27:	Preparing for Taxes in Retirement
February 3:	Taking Control of Your Workplace Retirement Benefits
February 10:	Retirement Income Tax Planning
February 17:	Medicare Update
February 24:	Planning for Retirement with Intention and Mindfulness
March 3:	Trust in Your Trust I
March 10:	Trust in Your Trust II
March 17:	Individual IRAs and Employer-Sponsored IRA Plans
March 24:	What You Should Know About Your Retirement Plan
March 31:	Annuities

All above events are FREE. Registration is required.
Registered guests will receive virtual event details prior to the program.

Register today for any of all of the programs at:
www.moaf.org/RetirementAtoZ

MU$EUM OF AMERICAN FINANCE

New York Public Library

Did you miss any of these recent programs?

Watch our event videos on demand at: moaf.org/videos

DEFAULT
The Landmark Court Battle over Argentina's $100 Billion Debt Restructuring
GREGORY MAKOFF
Foreword by LEE C. BUCHHEIT
INVESTING in U.S. FINANCIAL HISTORY
Understanding the Past to Forecast the Future
MARK J. HIGGINS, CFA, CFP®
MILTON FRIEDMAN
THE LAST CONSERVATIVE
JENNIFER BURNS
THE MONEY KINGS
The Epic Story of the Jewish Immigrants Who Transformed Wall Street and Shaped Modern America
DANIEL SCHULMAN
Best-selling author of SONS OF WICHITA
FAREED
Age of Revolutions
Progress and Backlash from 1600 to the Present
ZAKARIA

MU$EUM OF AMERICAN FINANCE

Follow us on social media!